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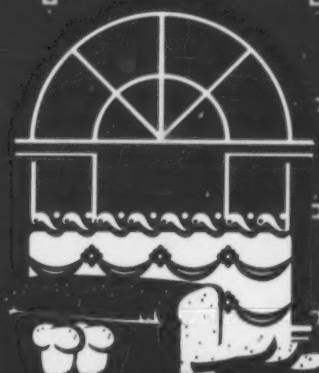
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ABSTRACT

These instructional materials are intended for a course on food production, management, and services involved in baking. The following introductory information is included: use of this publication; competency profile; instructional/task analysis; related academic and workplace skills list; tools, materials, and equipment list; 13 references; and a glossary. Twelve units of instruction are provided: (1) orientation; (2) basic baking ingredients; (3) use and care of hand tools and utensils; (4) use and care of equipment; (5) standard recipe use; (6) cookies; (7) yeast breads and rolls; (8) sweet yeast-dough products; (9) quick breads; (10) cakes and icings; (11) cake decorating; and (12) pastries and pies. Each unit contains some or all of the following sections: objective sheet; suggested activities; assignment and written test answers; written test; unit evaluation form; teacher supplements; transparency masters; information sheet; student supplements; assignment sheets; job sheets; and dissemination material. (NLA)

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Food Production, Management, and Services: Baking

Second Edition

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Edited by

Susan S. Walker

Developed by

The Mid-America Vocational Curriculum Consortium, Inc.

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**Food Production, Management,
and Services: Baking**

Teacher Edition

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Foreword

When the MAVCC staff began the process of revising the Food Production, Management, and Services series, it was found that the content presented was relatively sound and that the materials were presented in a logical manner to assist students in mastering the skills of their chosen occupation. This series contains a core publication, *Introduction*, and five spin-off publications, *Service*, *Production*, *Baking*, *Fast Foods*, and *Management*. Students may specialize in any of several occupations related to the food service area.

The success of this series of publications is due, in large part, to the capabilities of the personnel who worked with its development. Appreciation is extended to them for their valuable contributions to the publications.

These materials are not only designed for student use, but to assist teachers in improving instruction. Instructional materials in this publication are based on the competency-based concept of first stating the objectives (objective sheet), teaching to the objectives (information, assignment, and job sheets), and assessing to those same objectives (criterion-referenced evaluation instruments).

Every effort has been made to make these materials basic, readable, and by all means, useable. Three vital parts of instruction have been intentionally omitted from each publication: motivation, personalization, and localization. These areas are left to the individual instructors to present as part of their classroom/laboratory discussion.

Special attention should be given to the suggestions on ways to increase reinforcement of the academic and workplace basic skills. By reinforcing these skills, the instructor should assist students in improving their employability skills.

As you use these instructional materials, we hope that you will find that they contribute to the quality of your program. If any problems occur or if you have any suggestions for improvement of the materials, please call or write us.

Sylvia Clark, Chairman
Board of Directors
Mid-America Vocational
Curriculum Consortium

Jim Steward
Executive Director
Mid-America Vocational
Curriculum Consortium

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Appreciation is extended to those individuals who contributed their time and talent to the development of *Food Production, Management, and Services: Baking*.

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Committee

Virginia Bechtold	Nebraska
Hank Fischback	Colorado
LeRoy Gibson	Oklahoma
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A final thank you to Susan Walker for her assistance with editing and development of this second edition and to Jane Huston for her assistance in coordinating this project.

Use of Introductory Materials

Introductory materials are included in the teacher edition only and contain useful information to assist administrators and teachers in planning for instruction.

In addition to the general information such as the table of contents, foreword, and acknowledgements page, information is included on the following:

1. **Use of this publication**—Explains the components of a unit of instruction and how they should be used as part of the teaching/ learning process.
2. **Competency profile**—Provides a record of student performance for each task included in a unit of instruction. This becomes a part of the student's permanent records and should be utilized when directing the student toward employment opportunities.
3. **Instructional/task analysis**—Provides a quick review of contents of the publication; identifies cognitive (knowledge) skills and psychomotor (doing) skills addressed in each unit of instruction.
4. **Related academic and workplace skills list**—Classifies unit tasks (assignment sheets and job sheets) according to related academic and workplace skills being reinforced. Skill areas reflected by skill groups, sub skills, and descriptions have been identified using *Workplace Basics: The Skills Employers Want*, developed by the American Society for Training and Development (ASTD) and the U.S. Department of Labor and adapted by MAVCC.
5. **Tools, equipment, and materials list**—Provides a comprehensive list of those items needed to successfully complete the assignment sheets and/or job sheets; assists administrator/teacher in determining program costs.
6. **Reference list**—Provides a comprehensive list of resources used in the development of this publication.
7. **Glossary**—Provides a list of terms and definitions used in the publication.

As you use these materials, it is hoped that they will provide useful information to meet a variety of needs.

Use of This Publication

Instructional units

Food Production, Management, and Services: Baking contains twelve units of instruction. Each instructional unit in a teacher edition includes some or all of the following basic components of a unit of instruction: objective sheet, suggested activities for the teacher, answers to assignment sheets, answers to written test, written test, unit evaluation form, teacher supplements, transparency masters, information sheet, assignment sheets, student supplements, and job sheets.

All of the unit components focus on measurable and observable learning outcomes. Teachers are encouraged to supplement, personalize, localize, and motivate with these materials in order to develop a complete teaching/learning process.

Units of instruction are designed for use in more than one lesson or class period of instruction. Careful study of each unit of instruction by the teacher will help to determine the following:

- Amount of materials that can be covered in each class period.
- Skills that must be demonstrated.
- Amount of class time needed for demonstrations.
- Amount of time needed for student practice.
- Supplementary materials, including print and nonprint media and equipment and supplies, that must be ordered.
- Resource people who must be contacted.

Objective sheet (Color code: White)

Each unit of instruction is based on performance objectives which state the goals for successful completion of the course. These performance objectives are stated in two forms: unit objectives which state the expected performance of each student after completion of the unit of instruction, and specific objectives which state what the student must do to reach the unit objective.

The objectives should be provided for students and stressed throughout the teaching/learning process. This will help answer any questions concerning performance requirements for each instructional unit. The objectives can also help determine teaching strategies and instructional methods. Teachers should prepare for each unit by deciding how each objective can best be taught.

Teachers should feel free to modify, delete, or add objectives in order to meet the needs of the students and community. When objectives are added, the teacher should remember to supply the needed information, assignment and/or job sheets, and criterion test items.

Suggested activities (Color code: Pink)

This component is included only in the teacher edition. The suggested activities assist teachers during the preparation stage of the teaching/learning process by providing an instructional plan, teaching suggestions, and a list of supplemental resources. Ways to integrate academic and workplace skills have been included in the teacher suggestions, and skill areas have been noted in bold. (A table of academic and workplace skills with accompanying definitions has been provided on page xv.) The teacher should read the suggested activities before teaching the units and decide how each objective can best be taught. Time should also be allowed to obtain supplemental materials, prepare audiovisual materials, and contact outside resources. Duties of the teacher will vary according to the particular unit.

References used in the development of each unit are listed in the suggested-activities section, along with suggested supplemental resources that may be used to teach the unit. These materials can be used by the teacher to supplement her or his knowledge of the subject area or to help students with particular interests or objectives in the area covered.

Instructions for evaluating student performance on the job sheets are also included in the suggested-activities section. Teachers should select and discuss with students the rating scale that will be used.

Assignment and written test answers (Color code: Pink)

Assignment-sheet answers and written-test answers are designed to assist the teacher in evaluation of student performances.

Written test (Color code: Yellow)

This component provides criterion-referenced evaluation of every cognitive objective listed in the unit of instruction. The test appears in the teacher edition only, but duplication is permitted for student use. If objectives have been added, deleted, or modified, appropriate changes should be made on the written test. It is recommended that the tests be divided into shorter tests covering three or four objectives at a time and given soon after those objectives have been covered. A selection of test items from the units covered may be used for final tests at the end of each term if desired.

Unit evaluation form (Color code: White)

This sheet provides teachers with a record of each students performance on a unit of instruction. It includes space for assignment sheet ratings, job sheet ratings, written test scores, and teacher comments. The unit evaluation form is included in the teacher edition only, but may be duplicated.

Use of This Publication

Teacher supplements (Color code: White)

This component is included only in the teacher edition. Teacher supplements are optional materials for the teacher to use. They have three purposes: to provide the teacher with higher level materials to stretch the advanced student, with remedial information or practice to assist the less-advanced student, and with state-of-the-art information in which the teacher may not have background or with information that is not readily available in other books. Some teacher supplements may be duplicated for student use and are marked accordingly.

Transparency masters (Color code: White)

Transparencies are included in the teacher edition only and are used to direct the students' attention to the topic of discussion. They may provide illustrations, charts, schematics, or additional information needed to clarify and reinforce objectives included in the unit of instruction.

Information sheet (Color code: Green)

The information sheet provides the content essential for meeting the cognitive (knowledge) objectives of the unit. Teachers will find that the information sheet serves as an excellent guide for presenting background knowledge necessary to develop the skills specified in the unit objective. Students should read the information sheet before the information is discussed in class. Space is provided in margins for students and teachers to add notes that supplement, localize, personalize, or provide information for the teaching of each objective.

Student supplements (Color code: White)

Student supplements are included in the student manual. The information presented in a student supplement may consist of tables, charts, written information, forms, or other information students will need in order to complete one or more of the assignment and/or job sheets. Students are not directly tested over the information presented in a supplement; however, their ability to apply this information may be evaluated in the completion of assignment sheets or job sheets.

Assignment sheets (Color code: Tan)

Assignment sheets provide students with pencil and paper activities that give students the opportunity to make practical application of the knowledge in the information sheet. Criteria are provided to objectively evaluate student performance.

Job sheets (Color code: Blue)

The job sheets provide criteria to objectively evaluate student performance, a list of required equipment and materials, and a step-by-step procedure for performing a psychomotor skill. The teacher should discuss the equipment and materials available in the classroom and/or laboratory and demonstrate the procedure prior to having students practice procedure. When a student is ready to be evaluated, the teacher should follow instructions for evaluating student performance which may be found in the teacher guide.

Job sheets are an important segment of each unit. Job sheets provide potential employers with a picture of the skills being taught during training and the performances that might reasonably be expected from an individual who has had this training.

Disseminating material

Material may be given out a unit or page at a time to keep the material before the student always new. Some teachers ask students to furnish a three-ring binder or folder for the current unit of study. This is convenient for students taking the material home to study. Upon completion, each unit is then placed in a larger binder. Some teachers prefer to store the material by unit in filing cabinets or boxes until needed.

For best results, provide student materials for each student. Student manuals contain objective sheets, information sheets, student supplements, assignment sheets, and job sheets. Students should be allowed to take their materials home at the end of the course.

**Academic and Workplace Skills
(Classifications and Definitions)**

Skill Groups	Sub Skills	Definitions
Learning Skills	Learning to learn	Developing ability to apply knowledge to other situations; knowing how to learn.
Foundation Skills	Reading	Comprehending written information and analyzing, summarizing, and applying what has been read to a specific task.
	Writing	Communicating a thought, idea or fact in written form in a clear, concise manner.
	Math	Applying computation skills such as reasoning, estimation, and problem solving as they are actually used on the job.
	Science	Applying knowledge learned through study or practice that is based on scientific principles as they relate to specific tasks.
Communication Skills	Listening	Listening for content, conversation, long-term contexts, emotional meaning, and directions.
	Oral communication	Communicating a thought, idea, or fact in spoken form in a clear, concise manner.
Adaptability Skills	Creative thinking	Using imagination to create something new—i.e. an idea, invention, work of art.
	Problem solving (critical thinking)	Recognizing and defining problems, inventing, and implementing solutions, and tracking and evaluating results.
Personal Management Skills	Self-esteem	Developing self-confidence and creating a positive self-image.
	Motivation/goal setting	Setting and meeting defined goals and objectives.
	Personal and career development	Emphasizing self-direction by establishing and implementing a plan.
Group Effectiveness Skills	Interpersonal relations	Developing ability to maintain positive relations with others.
	Negotiation	Resolving conflict between two or more individuals.
	Teamwork	Working together in a group to reach a common goal.
Influence Skills	Organizational effectiveness	Adapting to the organization's goals, values, culture, and traditional modes of operation.
	Leadership	Directing/influencing group in performance of a specific task; accepting responsibility for others.

Food Production, Management, and Services: Baking

Competency Profile

Name: _____

Directions: Evaluate the student using the rating scale below. Write the appropriate number to indicate the degree of competency achieved. The descriptions associated with each of the numbers focus on a level of student performance for each of the tasks listed. The written test scoreline is provided for optional teacher use. It may not be applicable in all cases.

Option A

- Rating scale:
- 4 - Skilled - Can perform job with no additional training.
 - 3 - Moderately Skilled - Has performed job during training program; limited additional training may be required.
 - 2 - Limited Skill - Has performed job during training program; additional training is required to develop skill.
 - 1 - Unskilled - Is familiar with process, but is unable to perform job.
 - 0 - No Exposure - No information or practice provided during training program, complete training required.
 - NA - Non-applicable.

Option B

- Yes - Can perform with no additional training
No - Is unable to perform satisfactorily

Unit 1: Orientation

- _____ 1. Complete a checklist on what is most important to you in a job.
- _____ 2. _____

_____ Written Test Score

Unit 2: Basic Baking Ingredients

- _____ 1. Arrange food products using the FIFO rotation system.
- _____ 2. Complete a food requisition form.
- _____ 3. _____

_____ Written Test Score

Unit 3: Use and Care of Hand Tools and Utensils

- _____ 1. Check and compare accuracy of measuring methods.
- _____ 2. Weigh a dry ingredient using baker's scales.
- _____ 3. Weigh a liquid ingredient using portion scales.
- _____ 4. Measure small amounts of dry and liquid ingredients accurately.
- _____ 5. Measure a liquid ingredient accurately.
- _____ 6. _____

_____ Written Test Score

Unit 4: Use and Care of Equipment

- _____ 1. Operate a doughnut machine.
- _____ 2. Clean a doughnut machine.
- _____ 3. Operate a waste disposer.
- _____ 4. Operate a mixer.
- _____ 5. Clean a mixer.
- _____ 6. Operate a vertical cutter mixer.
- _____ 7. Clean a vertical cutter mixer.
- _____ 8. Operate a deep fat fryer.
- _____ 9. Clean a gas deep fat fryer.
- _____ 10. Clean an electric deep fat fryer.
- _____ 11. Operate a steam jacketed kettle.
- _____ 12. Clean a steam jacketed kettle.
- _____ 13. Operate a conventional oven.
- _____ 14. Clean a conventional oven.
- _____ 15. Operate a convection oven.
- _____ 16. Clean a convection oven.
- _____ 17. Operate a microwave oven.
- _____ 18. Clean a microwave oven.
- _____ 19. Operate a range.
- _____ 20. Clean a range.
- _____ 21. Use platform scales.
- _____ 22. Clean a work table.
- _____ 23. Clean a can opener.
- _____ 24. Operate a blender.
- _____ 25. Clean a blender.
- _____ 26. _____

_____ Written Test Score

Unit 5: Standard Recipe Use

- _____ 1. Reduce a recipe.
- _____ 2. Increase a recipe.
- _____ 3. Analyze a work situation.
- _____ 4. _____

_____ Written Test Score

Unit 6: Cookies

- _____ 1. Prepare and evaluate chocolate chip cookies.
- _____ 2. Prepare and evaluate brownies.
- _____ 3. Prepare and evaluate chocolate icebox cookies.
- _____ 4. Prepare and evaluate sugar cookies.
- _____ 5. Prepare and evaluate butterscotch icebox cookies.
- _____ 6. Prepare and evaluate vanilla wafers.
- _____ 7. Prepare and evaluate yellow icebox cookies.
- _____ 8. Prepare and evaluate pinwheel cookies.
- _____ 9. Use a pastry bag to bag out wafer cookies.
- _____ 10. _____

_____ Written Test Score

Unit 7: Yeast Breads and Rolls

- _____ 1. Prepare and evaluate white bread.
- _____ 2. Prepare and evaluate yeast rolls.
- _____ 3. Prepare and evaluate sponge rolls.
- _____ 4. _____

_____ Written Test Score

Unit 8: Sweet Yeast-Dough Products

- _____ 1. Prepare and evaluate basic sweet rolls.
- _____ 2. Prepare and evaluate cinnamon rolls.
- _____ 3. Prepare Danish pastry dough.
- _____ 4. Prepare and evaluate raised doughnuts.
- _____ 5. Prepare a glaze and icing for sweet yeast-dough products.
- _____ 6. _____

_____ Written Test Score

Unit 9: Quick Breads

- _____ 1. Prepare and evaluate plain muffins.
- _____ 2. Prepare and evaluate baking powder biscuits.
- _____ 3. Prepare and evaluate cornbread.
- _____ 4. Prepare and evaluate banana nut bread.
- _____ 5. Prepare and evaluate cake doughnuts.
- _____ 6. _____

_____ Written Test Score

Unit 10: Cakes and Icings

- _____ 1. Prepare and evaluate fudge cake.
- _____ 2. Prepare and evaluate angel food cake.
- _____ 3. Prepare and evaluate an orange chiffon cake.
- _____ 4. Prepare and evaluate a white cake.
- _____ 5. Prepare and evaluate boiled icing.
- _____ 6. Prepare and evaluate orange icing.
- _____ 7. Ice a cake.
- _____ 8. _____

_____ Written Test Score

Unit 11: Cake Decorating

- _____ 1. Prepare and evaluate buttercream icing.
- _____ 2. Prepare and evaluate royal icing.
- _____ 3. Ice a cake before decorating.
- _____ 4. Prepare a decorating cone and tube.
- _____ 5. Make a border.
- _____ 6. Make a rose.
- _____ 7. _____

_____ Written Test Score

Unit 12: Pastries and Pies

- _____ 1. Prepare and evaluate choux paste dough.
- _____ 2. Prepare and evaluate custard filling for choux paste products.
- _____ 3. Prepare pie crust.
- _____ 4. Prepare and evaluate custard pie.
- _____ 5. Prepare and evaluate butterscotch cream pie.
- _____ 6. Prepare and evaluate lemon chiffon pie.
- _____ 7. Prepare and evaluate graham cracker crust.
- _____ 8. Prepare and evaluate a fruit pie.
- _____ 9. Prepare a lattice top for a pie.
- _____ 10. Prepare and evaluate meringue topping.
- _____ 11. _____

_____ Written Test Score

COMMENTS: _____

Evaluator: _____ Date: _____

* Permission to duplicate this profile is granted.

Food Production, Management, and Services: Baking

Instructional/Task Analysis

**Related Information: What
the Student Should Know**

**Application: What the
Student Should Be Able to Do**

Unit 1: Orientation

- | | |
|--|---|
| 1. Businesses that employ bakery personnel | 6. Complete a checklist of what is most important to you in a job |
| 2. Bakery personnel job classifications and descriptions | |
| 3. Career ladders for bakery personnel in large hotels and restaurants | |
| 4. General duties and responsibilities of bakery personnel | |
| 5. Advantages and disadvantages of working in a bakery operation | |

Unit 2: Basic Baking Ingredients

1. Terms and definitions
2. Common types of baking ingredients
3. Basic baking ingredients and their purposes
4. Terms related to ingredient quality, receiving, and storage and their definitions
5. Labeling requirements for food products
6. Information that must be specified when ordering food products
7. Procedures for receiving food
8. Dry storage requirements
9. Types of dry storeroom items

10. Cleaning and exterminating supplies
11. Duties of storeroom personnel
12. Purpose of a storeroom food requisition
13. Refrigerated storage requirements
14. General practices and procedures for refrigerated storage
15. Storage requirements for basic baking ingredients
16. Arrange food products using the FIFO rotation system
17. Complete a food requisition form

Unit 3: Use and Care of Hand Tools and Utensils

1. Knives commonly used in baking operations
2. Knives and their uses
3. Care of knives
4. Knife safety practices
5. Baking tools and utensils identification
6. Baking tools and utensils and their uses
7. Cooking tools and utensils identification
8. Cooking tools and utensils and their uses
9. Food preparation tools and utensils identification
10. Food handling tools and utensils and their uses
11. Food handling tools and utensils identification

**Related Information: What
the Student Should Know**

12. Food handling tools and utensils and their uses
13. Measuring and weighing tools and utensils identification
14. Measuring and weighing tools and utensils and their uses
15. Guidelines for the use and care of hand tools and utensils

**Application: What the
Student Should Be Able to Do**

16. Check and compare accuracy of measuring methods
17. Weigh a dry ingredient using baker's scales
18. Weigh a liquid ingredient using portion scales
19. Measure small amounts of dry and liquid ingredients accurately
20. Measure a liquid ingredient accurately

Unit 4: Use and Care of Equipment

1. Types of baking equipment
2. Equipment that must be sanitized just prior to use
3. Types of commercial baking equipment
4. Commercial baking equipment and their characteristics
5. Guidelines for operating procedures
6. Safety requirements for equipment

7. Operate a doughnut machine
8. Clean a doughnut machine
9. Operate a waste disposer
10. Operate a mixer
11. Clean a mixer
12. Operate a vertical cutter mixer
13. Clean a vertical cutter mixer
14. Operate a deep fat fryer
15. Clean a gas deep fat fryer
16. Clean an electric deep fat fryer
17. Operate a steam jacketed kettle
18. Clean a steam jacketed kettle
19. Operate a conventional oven
20. Clean a conventional oven
21. Operate a convection oven
22. Clean a convection oven

**Related Information: What
the Student Should Know**

**Application: What the
Student Should Be Able to Do**

23. Operate a microwave oven
24. Clean a microwave oven
25. Operate a range
26. Clean a range
27. Use platform scales
28. Clean a work table
29. Clean a can opener
30. Operate a blender
31. Clean a blender

Unit 5: Standard Recipe Use

1. Terms and definitions
2. Reasons for using a standardized recipe
3. Standard recipe headings and their descriptions
4. General procedures for following a standard recipe
5. Abbreviations of weights and measures used in standard recipes
6. Equivalents of weights and measures used in standard recipes
7. Common can sizes and their equivalents
8. Reasons for accurate weighing and measuring
9. Reasons for substitutions in standard recipes

**Related Information: What
the Student Should Know**

10. Using a conversion table when adjusting standard recipes
11. Weights and measures used in a standard recipe
12. Formula for adjusting yield on a standard recipe
13. Reasons for checking recipe calculations
14. Guidelines for assembling supplies
15. Ways to coordinate the use of needed equipment
16. Guidelines for organizing work
17. Work simplification methods
18. Guidelines for timing food preparation

**Application: What the
Student Should Be Able to Do**

19. Reduce a recipe
20. Increase a recipe
21. Analyze a work situation

Unit 6: Cookies

1. Terms and definitions
2. One-stage and creaming mixing methods
3. Characteristics of soft, stiff, and very stiff cookies
4. Panning procedures and basic types of cookie makeups
5. Guidelines for the proper care of cookie baking pans
6. Factors affecting the baking and cooling of cookies
7. Cookie quality standards and their descriptions

**Related Information: What
the Student Should Know**

8. Common cookie problems and their causes
9. Guidelines about coloring, icing, and garnishing cookies
10. Guidelines for cookie storage
11. Types of convenience cookie products

**Application: What the
Student Should Be Able to Do**

12. Prepare and evaluate chocolate chip cookies
13. Prepare and evaluate brownies
14. Prepare and evaluate chocolate icebox cookies
15. Prepare and evaluate sugar cookies
16. Prepare and evaluate butterscotch icebox cookies
17. Prepare and evaluate vanilla wafers
18. Prepare and evaluate yellow icebox cookies
19. Prepare and evaluate pinwheel cookies
20. Use a pastry bag to bag out wafer cookies

Unit 7: Yeast Breads and Rolls

1. Terms and definitions
2. Using yeast in bread doughs
3. Reasons for mixing dough
4. Basic methods of mixing dough
5. Production stages for bread and roll dough
6. Quality standards for yeast breads and rolls
7. Common types of yeast-raised rolls
8. Common problems of yeast-raised products and their causes
9. Storage methods for unbaked yeast dough
10. Short-term and long-term storage methods for baked bread and rolls

11. Prepare and evaluate white bread
12. Prepare and evaluate yeast rolls
13. Prepare and evaluate sponge rolls

**Related Information: What
the Student Should Know**

**Application: What the
Student Should Be Able to Do**

Unit 8: Sweet Yeast-Dough Products

- | | |
|---|--|
| 1. Terms and definitions | 11. Prepare and evaluate basic sweet rolls |
| 2. Types of sweet yeast-dough products and their descriptions | 12. Prepare and evaluate cinnamon rolls |
| 3. Danish and basic sweet doughs | 13. Prepare Danish pastry dough |
| 4. Production of basic sweet yeast-dough | 14. Prepare and evaluate raised doughnuts |
| 5. Shaping operations for basic sweet rolls | 15. Prepare a glaze and icing for sweet yeast-dough products |
| 6. Production of Danish pastry dough | |
| 7. Shaping operations for common Danish pastries | |
| 8. Production of doughnuts and other fried sweet yeast-dough products | |
| 9. Shaping operations for common fried sweet yeast-dough products | |
| 10. Basic types of fillings and toppings for sweet yeast-dough products | |

Unit 9: Quick Breads

- | | |
|--|--|
| 1. Terms and definitions | 8. Prepare and evaluate plain muffins |
| 2. Quick bread classifications and their dough or batter types | 9. Prepare and evaluate baking powder biscuits |
| 3. Types of leavening agents | 10. Prepare and evaluate cornbread |
| 4. Quality standards for biscuits | 11. Prepare and evaluate banana nut bread |
| 5. Quality standards for muffins | 12. Prepare and evaluate cake doughnuts |
| 6. Quality standards for cornmeal muffins and cornbread | |
| 7. Finishes for quick bread | |

**Related Information: What
the Student Should Know**

**Application: What the
Student Should Be Able to Do**

Unit 10: Cakes and Icing

- | | |
|--|---|
| 1. Terms and definitions | 14. Prepare and evaluate fudge cake |
| 2. Types of cakes and their descriptions | 15. Prepare and evaluate angel food cake |
| 3. Cake mixing methods and their descriptions | 16. Prepare and evaluate an orange chiffon cake |
| 4. Cake baking guidelines | 17. Prepare and evaluate a white cake |
| 5. Quality standards for shortened cakes | 18. Prepare and evaluate boiled icing |
| 6. Quality standards for foam and chiffon cakes | 19. Prepare and evaluate orange icing |
| 7. Proper cake storage | 20. Ice a cake |
| 8. Icing terms and definitions | |
| 9. Purposes of icings | |
| 10. Basic types of icings and their applications | |
| 11. Procedures for icing layer cakes | |
| 12. Quality standards for icings | |
| 13. Portioning cakes | |

Unit 11: Cake Decorating

1. Equipment used in cake decorating
2. Advantages of paste color over liquid or powdered colors for cake decorating
3. Color combinations and their resultant colors
4. Color terms and definitions

**Related Information: What
the Student Should Know**

5. Guidelines for preparing a cake for decorating
6. Guidelines for using a flower nail

**Application: What the
Student Should Be Able to Do**

7. Prepare and evaluate buttercream icing
8. Prepare and evaluate royal icing
9. Ice a cake before decorating
10. Prepare a decorating cone and tube
11. Make a border
12. Make a rose

Unit 12: Pastries and Pies

- | | |
|---|---|
| 1. Terms and definitions | 12. Prepare and evaluate choux paste dough |
| 2. Variations of puff paste dough | 13. Prepare and evaluate custard filling for choux paste products |
| 3. Choux paste products and their methods of preparation | 14. Prepare pie crust |
| 4. Types of pies and pie crusts | 15. Prepare and evaluate custard pie |
| 5. General steps in mixing pie dough | 16. Prepare and evaluate butterscotch cream pie |
| 6. Guidelines for rolling and shaping pie dough | 17. Prepare and evaluate lemon chiffon pie |
| 7. Guidelines for baking pies | 18. Prepare and evaluate graham cracker crust |
| 8. Quality standards for pastry | 19. Prepare and evaluate a fruit pie |
| 9. Types of pastry and pie fillings and their descriptions | 20. Prepare a lattice top for a pie |
| 10. Pie toppings and the types of pies on which they are generally used | 21. Prepare and evaluate meringue topping |
| 11. Standards of quality for pie fillings and toppings | |

**Related Academic and Workplace Skills
For Food Production, Management, and Services: Baking**

Task	Skill Group	Sub Skill	Description
Unit 1: Orientation			
Complete a checklist of what is most important to you in a job (A.S. 1)	Foundation Skills	Writing	Completes form accurately; presents answers/conclusions in a clear and understandable form
	Adaptability Skills	Creative thinking	Forms opinions
		Problem solving	Demonstrates logical reasoning in reaching a conclusion
	Personal Management Skills	Personal and career development	Analyzes own personality characteristics; explores career opportunities
Unit 2: Basic Baking Ingredients			
Arrange food products using FIFO rotation system (A.S. 1)	Foundation Skills	Reading	Applies information and concepts derive from printed materials; follows written directions
	Adaptability Skills	Problem solving	Applies knowledge to implement work-related systems directions
Complete a food requisition form (A.S. 2)	Foundation Skills	Reading	Determines what information is needed; follows written directions
		Writing	Completes form accurately; writes/prints legibly
Unit 3: Use and Care of Hand Tools and Utensils			
Check and compare accuracy of measuring methods (A.S. 1)	Foundation Skills	Reading	Follows written directions
		Writing	Presents answers/conclusions in a clear and understandable form; writes/prints legibly
Weigh a dry ingredient using baker's scales (J.S. 1)	Foundation Skills	Reading	Applies information to job performance; follows written directions
		Math	Makes precision measurements using a baker's scale

Task	Skill Group	Sub Skill	Description
Weigh a liquid ingredient using portion scales (J.S. 2)	Foundation Skills	Reading	Applies information to job performance; follows written directions
		Math	Makes precision measurements using a portion scale
Measure small amounts of dry and liquid ingredients accurately (J.S. 3)	Foundation Skills	Reading	Applies information to job performance; follows written directions
		Math	Takes measurements using common measuring devices
Measure a liquid ingredient accurately (J.S. 4)	Foundation Skills	Reading	Applies information to job performance; follows written directions
		Math	Takes measurements using common measuring devices

Unit 4: Use and Care of Equipment

Operate a doughnut machine (J.S. 1)	Foundation Skills	Reading	Reads and follows instructions to operate equipment
Clean a doughnut machine (J.S. 2)	Foundation Skills	Reading	Uses appropriate materials and techniques as specified
Operate a waste disposer (J.S. 3)	Foundation Skills	Reading	Reads and follows instructions to operate equipment
Operate a mixer (J.S. 4)	Foundation Skills	Reading	Applies information to job performance; reads and follows instructions to operate equipment
Clean a mixer (J.S. 5)	Foundation Skills	Reading	Uses appropriate materials and techniques as specified
Operate a vertical cutter mixer (J.S. 6)	Foundation Skills	Reading	Applies information to job performance; reads and follows instructions to operate equipment
		Science	Observes sanitation requirements
Clean a vertical cutter mixer (J.S. 7)	Foundation Skills	Reading	Uses appropriate materials and techniques as specified
		Science	Observes sanitation requirements
Operate a deep fat fryer (J.S. 8)	Foundation Skills	Reading	Applies information to job performance; reads and follows instructions to operate equipment
		Science	Observes sanitation requirements

Task	Skill Group	Sub Skill	Description
Clean a gas deep fat fryer (J.S. 9)	Foundation Skills	Reading	Uses appropriate materials and techniques as specified
		Science	Observes sanitation requirements
Clean an electric deep fat fryer (J.S. 10)	Foundation Skills	Reading	Applies information to job performance; reads and follows instructions to operate equipment
		Science	Observes sanitation requirements
Operate a steam jacketed kettle (J.S. 11)	Foundation Skills	Reading	Uses appropriate materials and techniques as specified
Clean a steam jacketed kettle (J.S. 12)	Foundation Skills	Reading	Applies information to job performance; reads and follows instructions to operate equipment
Operate a conventional oven (J.S. 13)	Foundation Skills	Reading	Reads and follows instructions to operate equipment
Clean a conventional oven (J.S. 14)	Foundation Skills	Reading	Uses appropriate materials and techniques as specified
Operate a convection oven (J.S. 15)	Foundation Skills	Reading	Reads and follows instructions to operate equipment
Clean a convection oven (J.S. 16)	Foundation Skills	Reading	Uses appropriate materials and techniques as specified
Operate a microwave oven (J.S. 17)	Foundation Skills	Reading	Applies information to job performance; reads and follows instructions to operate equipment
Clean a microwave oven (J.S. 18)	Foundation Skills	Reading	Uses appropriate materials and techniques as specified
Operate a range (J.S. 19)	Foundation Skills	Reading	Applies information to job performance; reads and follows instructions to operate equipment
Clean a range (J.S. 20)	Foundation Skills	Reading	Uses appropriate materials and techniques as specified
Use platform scales (J.S. 21)	Foundation Skills	Reading	Reads and follows instructions to operate equipment
		Math	Takes measurements using common measuring devices
Clean a work table (J.S. 22)	Foundation Skills	Reading	Uses appropriate materials and techniques as specified
		Science	Observes sanitation requirements

Task	Skill Group	Sub Skill	Description
Clean a can opener (J.S. 23)	Foundation Skills	Reading	Uses appropriate materials and techniques as specified
Operate a blender (J.S. 24)	Foundation Skills	Reading	Applies information to job performance; reads and follows instructions to operate equipment
Clean a blender (J.S. 25)	Foundation Skills	Reading	Uses appropriate materials and techniques as specified

Unit 5: Standard Recipe Use

Reduce a recipe (A.S. 1)	Foundation Skills	Math	Applies principles of subtraction to work situation; calculates units of measurement
Increase a recipe (A.S. 2)	Foundation Skills	Math	Applies principles of addition to work situation; calculates units of measurement
Analyze a work situation (A.S. 3)	Foundation Skills	Reading	Follows written directions
		Writing	Presents answers/conclusions in a clear and understandable form
		Oral Communications	Communicates a thought, idea, or fact in spoken form
	Adaptability Skills	Listening	Listens for conversation
		Problem solving	Draws conclusions from observations and evaluates conditions and gives possible solutions

Unit 6: Cookies

Prepare and evaluate chocolate chip cookies (J.S. 1)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
		Math	Measures ingredients using common measuring devices; calculates totals using addition
	Adaptability Skills	Creative thinking	Forms opinions
Prepare and evaluate brownies (J.S. 2)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified

Task	Skill Group	Sub Skill	Description	
Prepare and evaluate chocolate icebox cookies (J.S. 3)		Science	Observes health code/ sanitation requirements	
		Writing	Presents answers/conclusions in a clear and understandable form	
		Math	Measures ingredients using common measuring devices; calculates totals using addition	
	Adaptability Skills	Creative thinking	Forms opinions	
	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified	
		Science	Observes health code/ sanitation requirements	
Writing		Presents answers/conclusions in a clear and understandable form		
Prepare and evaluate sugar cookies (J.S. 4)		Math	Measures ingredients using common measuring devices; calculates totals using addition	
		Adaptability Skills	Creative thinking	Forms opinions
		Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements	
		Writing	Presents answers/conclusions in a clear and understandable form	
		Math	Measures ingredients using common measuring devices; calculates totals using addition	
Prepare and evaluate butterscotch icebox cookies (J.S. 5)		Adaptability Skills	Creative thinking	Forms opinions
		Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
			Science	Observes health code/ sanitation requirements
	Writing		Presents answers/conclusions in a clear and understandable form	

Task	Skill Group	Sub Skill	Description
Prepare and evaluate vanilla wafers (J.S. 6)	Foundation Skills	Math	Measures ingredients using common measuring devices; calculates totals using addition
		Adaptability Skills	Creative thinking
		Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
Prepare and evaluate yellow icebox cookies (J.S. 7)	Foundation Skills	Math	Measures ingredients using common measuring devices; calculates totals using addition
		Adaptability Skills	Creative thinking
		Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
Prepare and evaluate pinwheel cookies (J.S. 8)	Foundation Skills	Math	Measures ingredients using common measuring devices; calculates totals using addition
		Adaptability Skills	Creative thinking
		Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
	Foundation Skills	Math	Measures ingredients using common measuring devices; calculates totals using addition
		Adaptability Skills	Creative thinking
		Reading	Applies information to job performance; uses appropriate materials and techniques as specified

Task	Skill Group	Sub Skill	Description
Use a pastry bag to bag out wafer cookies (J.S. 9)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Math	Measures ingredients using common measuring devices
Unit 7: Yeast Breads and Rolls			
Prepare and evaluate white bread (J.S. 1)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
		Math	Measures ingredients using common measuring devices; calculates totals using addition
	Adaptability Skills	Creative thinking	Forms opinions
Prepare and evaluate yeast rolls (J.S. 2)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
		Math	Measures ingredients using common measuring devices; calculates totals using addition
	Adaptability Skills	Creative thinking	Forms opinions
Prepare and evaluate sponge rolls (J.S. 3)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements

Task	Skill Group	Sub Skill	Description
Unit 8: Sweet Yeast-Dough Products	Adaptability Skills	Writing	Presents answers/conclusions in a clear and understandable form
		Math	Measures ingredients using common measuring devices; calculates totals using addition
		Creative thinking	Forms opinions
Prepare and evaluate basic sweet rolls (J.S. 1)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
		Math	Measures ingredients using common measuring devices; calculates totals using addition
Prepare and evaluate cinnamon rolls (J.S. 2)	Adaptability Skills	Creative thinking	Forms opinions
Prepare and evaluate cinnamon rolls (J.S. 2)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
		Math	Measures ingredients using common measuring devices; calculates totals using addition
Prepare Danish pastry dough (J.S. 3)	Adaptability Skills	Creative thinking	Forms opinions
Prepare Danish pastry dough (J.S. 3)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements

Task	Skill Group	Sub Skill	Description
Prepare and evaluate raised doughnuts (J.S. 4)	Foundation Skills	Math	Measures ingredients using common measuring devices
		Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
	Adaptability Skills	Math	Measures ingredients using common measuring devices; calculates totals using addition
Prepare a glaze and icing for sweet yeast-dough products (J.S. 5)	Foundation Skills	Creative thinking	Forms opinions
		Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Math	Measures ingredients using common measuring devices
	Adaptability Skills	Creative thinking	Forms opinions
Unit 9: Quick Breads			
Prepare and evaluate plain muffins (J.S. 1)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
		Math	Measures ingredients using common measuring devices; calculates totals using addition
	Adaptability Skills	Creative thinking	Forms opinions

Task	Skill Group	Sub Skill	Description
Prepare and evaluate baking powder biscuits (J.S. 2)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
		Math	Measures ingredients using common measuring devices; calculates totals using addition
	Adaptability Skills	Creative thinking	Forms opinions
Prepare and evaluate corn bread (J.S. 3)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
		Math	Measures ingredients using common measuring devices; calculates totals using addition
	Adaptability Skills	Creative thinking	Forms opinions
Prepare and evaluate banana nut bread (J.S. 4)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
		Math	Measures ingredients using common measuring devices; calculates totals using addition
	Adaptability Skills	Creative thinking	Forms opinions
Prepare and evaluate cake doughnuts (J.S. 5)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements

Task	Skill Group	Sub Skill	Description
	Adaptability Skills	Writing	Presents answers/conclusions in a clear and understandable form
		Math	Measures ingredients using common measuring devices; calculates totals using addition
		Creative thinking	Forms opinions
Unit 10: Cakes and Icings			
Prepare and evaluate fudge cake (J.S. 1)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
		Math	Measures ingredients using common measuring devices; calculates totals using addition
	Adaptability Skills	Creative thinking	Forms opinions
Prepare and evaluate angel food cake (J.S. 2)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
		Math	Measures ingredients using common measuring devices; calculates totals using addition
	Adaptability Skills	Creative thinking	Forms opinions
Prepare and evaluate orange chiffon cake (J.S. 3)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
		Math	Measures ingredients using common measuring devices; calculates totals using addition
	Adaptability Skills	Creative thinking	Forms opinions

Task	Skill Group	Sub Skill	Description
Prepare and evaluate white cake (J.S. 4)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
		Math	Measures ingredients using common measuring devices; calculates totals using addition
	Adaptability Skills	Creative thinking	Forms opinions
Prepare and evaluate boiled icing (J.S. 5)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
		Math	Measures ingredients using common measuring devices; calculates totals using addition
	Adaptability Skills	Creative thinking	Forms opinions
Prepare and evaluate orange icing (J.S. 6)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
		Math	Measures ingredients using common measuring devices; calculates totals using addition
	Adaptability Skills	Creative thinking	Forms opinions
Ice a cake (J.S. 7)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements

Task	Skill Group	Sub Skill	Description
Unit 11: Cake Decorating			
Prepare and evaluate buttercream icing (J.S. 1)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
		Math	Measures ingredients using common measuring devices; calculates totals using addition
	Adaptability Skills	Creative thinking	Forms opinions
Prepare and evaluate royal icing (J.S. 2)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
		Math	Measures ingredients using common measuring devices; calculates totals using addition
	Adaptability Skills	Creative thinking	Forms opinions
Ice a cake before decorating (J.S. 3)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
Prepare a decorating cone and tube (J.S. 4)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
Make a border (J.S. 5)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements

Task	Skill Group	Sub Skill	Description
Make a rose (J.S. 6)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
Unit 12: Pastries and Pies			
Prepare and evaluate choux paste dough (J.S. 1)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
		Math	Measures ingredients using common measuring devices
	Adaptability Skills	Creative thinking	Forms opinions
Prepare and evaluate custard filling for choux paste products (J.S. 2)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
		Math	Measures ingredients using common measuring devices
	Adaptability Skills	Creative thinking	Forms opinions
Prepare pie crust (J.S. 3)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Math	Measures ingredients using common measuring devices

Task	Skill Group	Sub Skill	Description
Prepare and evaluate custard pie (J.S. 4)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
		Math	Measures ingredients using common measuring devices; calculates totals using addition
	Adaptability Skills	Creative thinking	Forms opinions
Prepare and evaluate butterscotch cream pie (J.S. 5)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
		Math	Measures ingredients using common measuring devices; calculates totals using addition
	Adaptability Skills	Creative thinking	Forms opinions
Prepare and evaluate lemon chiffon pie (J.S. 6)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
		Math	Measures ingredients using common measuring devices; calculates totals using addition
	Adaptability Skills	Creative thinking	Forms opinions
Prepare and evaluate graham cracker crust (J.S. 7)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form

Task	Skill Group	Sub Skill	Description
Prepare and evaluate fruit pie (J.S. 8)	Adaptability Skills	Math	Measures ingredients using common measuring devices; calculates totals using addition
		Creative thinking	Forms opinions
	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
Prepare a lattice top for a pie (J.S. 9)	Adaptability Skills	Math	Measures ingredients using common measuring devices; calculates totals using addition
		Creative thinking	Forms opinions
	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Math	Measures size of product with ruler
Prepare and evaluate meringue topping (J.S. 10)	Foundation Skills	Reading	Applies information to job performance; uses appropriate materials and techniques as specified
		Science	Observes health code/ sanitation requirements
		Writing	Presents answers/conclusions in a clear and understandable form
	Adaptability Skills	Math	Measures ingredients using common measuring devices
		Creative thinking	Forms opinions

Food Production, Management, and Services: Baking

Tools, Equipment, and Materials List

Agitator
Bakers' scale
Baking pans
Baking sheets
Biscuit cutter
Blender
Brush
Bun pans
Cake pans, 9"
Can opener
Cardboard, stiff and clean
Clean cloth
Clean insert
Container
Convection oven
Conventional oven
Cookie press
Cooling racks
Cutting board
Decorating (icing) tubes and tips
Decorating nail
Deep fat fryer
Disher, Nos. 24, 30, 40, and 60
Dough cutter
Dough hook
Doughnut cutter
Doughnut machine
Filter cone and holder
Flat beater
Flat paddle
French knife
Fryer screens
Gong brush
Grater
Ingredient scoop
Loaf pans
Long handled metal scraper
Microwave oven
Mixer
Mixing baffle
Mixing bowls
Mixing utensils
Muffin tins
Oven mitt or pot holder
Paper towels
Parchment paper
Pastry bag and tips

Pastry brush
Pastry knife
Pastry wheel
Pie pans, 8", 9"
Platform scale
Portion scale
Proof box
Range
Refrigerator
Rolling pin
Rotary toaster
Rubber scraper
Ruler
Sauce pan
Scissors
Scraper
Serving pan with perforated insert
Set of measuring spoons
Shortening container
Shortening filter machine
Sifter
Skillet
Skimmer
Spatula
Stainless steel polish
Steam jacketed kettle
Tape or stapler
Thermometer
Tongs
Transparent measuring cup
Tube cake pans
Turntable
Vertical cutter mixer
Waste disposer
Waxed paper
Wire whip
Work table

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Glossary

Absorption — The ability of flour and other dry ingredients to take in and hold liquids

Adjusting — Changing or altering to fit what is needed

All-purpose flour — A blend of milled hard and soft wheats

AP — "As purchased" amounts by weight or measure

Bag out — To press a soft dough through a pastry bag and tube, producing a particular shape or design

Bar — Cookies that are shaped, or cut to size, after they have been baked

Batter — An unbaked mixture of ingredients that is thin enough to be scooped, spooned, or poured

Benching — Technique used for rounding individual rolls

Biscuits — Small round individual quick breads often made with baking powder as a source of leavening

Blend — Two or more seasonings added together

Bread flour — Milled hard wheat

Cake flour — Milled, unenriched soft wheat

Cake tester — A stiff wire that can be inserted into a cake to help determine whether or not the cake is done

Caramel — A mixture of brown sugar, shortening, honey, and milk

Carbon dioxide — A leavening agent formed when yeast, baking powder, or baking soda is used in a recipe

Chiffon cake — A cake that contains both foam and fat with no chemical leavening agent added; ingredients are mixed separately and folded together

Choux paste — A smooth mixture made by cooking flour, shortening, and water together and then adding eggs

Compressed yeast — A moist form of yeast that must be dissolved in liquid before being used in dough

Consistency — The degree of density of a mixture; its thickness or thinness

Convert — To change or exchange for something equal in value

Cream — To work one or more ingredients together until soft and blended

Creaming — Method of mixing fat and sugar that adds air to the mixture and helps make the product light and fluffy

Cream of tartar — A stabilizer often used in foam cakes

Cream puff — A ball-shaped choux paste product consisting of a crisp outer shell filled with whipped cream or a cream filling

Crumb topping — A mixture of flour, sugar, spices or other flavorings, and shortening or butter sprinkled over open-faced fruit pies

Crust — The part of a pie made from dough

Cut in — To distribute shortening into dry ingredients in small particles by using a chopping motion

Danish pastry dough — A raised sweet yeast-dough that has additional butter, margarine, or shortening rolled into it to provide flakiness

Developed dough — Dough that has been made smooth by additional mixing after the ingredients are blended; additional mixing also develops the gluten

Disher — Utensil used to evenly portion drop cookie doughs by size and weight

Dissolve — To mix dry ingredients into a liquid by stirring

Docking — Making small holes or cuts in a product before baking

Dough — Mixture of ingredients that is thick enough to hold its shape or to be kneaded or rolled out

Drop — To drop stiff dough by a spoon or disher

Dry yeast — A granular form of yeast that may be combined with other dry ingredients for mixing into bread dough

Dust — To lightly cover with flour to prevent sticking

Eclair — A choux paste product consisting of a cylindrical shell filled with pastry cream and often covered with chocolate icing

Enriched flour — Flour to which various amounts of nutrients have been added within limits specified by the government

EP — "Edible portion" by weight or measure

Equivalent — Equal in quantity or value

Fermentation — The process of raising a dough through the action of yeast

Filling — A flavorful mixture placed in or under a pie crust

Flaky — Made up of many very thin layers accomplished by mixing shortening and flour together to form lumps

Fluid ounce — A liquid measure of one ounce

Fluting — Pinching the dough on the rim of a pie plate to form a repetitive design

Foam cake — A cake that does not contain fat and is usually leavened entirely by the natural agents air and steam

Fold — To mix by gently turning ingredients without stirring or beating

Fondant — A cooked mixture of water, glucose, and granulated sugar used as an icing or as a base for an icing

Formula — Another term used in bakeries to refer to a standardized recipe

Fraction — A quantity less than a whole

Glaze — Thin icing or syrup used to seal in moisture

Gluten — An elastic substance that is formed when flour and water are mixed; provides baked products with strength

Gradually — In stages; step by step; little by little

Grease — To apply fat or oil to the inside bottom and sides of a baking pan with a brush or pad

Hard wheat — A type of grain that contains a high proportion of gluten and is excellent for breads and rolls

Icebox — Type of cookie for which very stiff dough is shaped, refrigerated, cut to desired proportions, and baked

Increase — To make larger

Knead — To handle with pressing, folding, and stretching motion

Leavening — A gas such as air, steam, or carbon dioxide which, when trapped in a dough or batter and heated, causes the product to increase in volume

Leavening agent — A substance that forms the gas responsible for leavening

Loaf — A shaped or molded mass of bread

Loaf cake — A cake baked in a loaf pan

Loaf quick bread — A quick bread that is baked in a loaf pan

Makeup — To form or shape, as in molding a roll, loaf of bread, or roll of cookie dough

Measure — To obtain a specific amount of food by volume

Mechanical roller — A machine used in large bakeries to roll out pie crusts

Meringue — A pie topping made of egg whites beaten with sugar

Moist — Containing some liquid or moisture; not dry

Muffins — Small individual quick breads made from a batter and baked in a cup-shaped pan

Napoleon — A puff paste product in which three layers of baked puff pastry are separated by two layers of filling, and the top pastry layer is covered with icing

Overmixing — Excessive blending of ingredients that may result in a tough cookie product

Pan coating — Mixture of cornstarch or flour and shortening used to coat cake pans

Panning — Method in which dough is placed on or in pan

Pan-proofing — The final proofing process in which shaped rolls and loaves of bread in baking pans are placed in a proof box to rise

Parchment — A waterproof, grease-resistant paper

Pastry — A baked food made of pie dough or paste dough

Pastry bag — A utensil used to bag out soft dough cookies

Pastry flour — Milled soft wheat

Pastry method — A mixing method in which the shortening is cut into the dry ingredients to help make the product flaky

Pastry shell — A puff product used as a base to hold the entrée, a dessert mixture, or an hors d'oeuvre

Pie — A dessert consisting of a flavorful filling baked in a pan lined with pastry or topped with pastry or both

Pie tape — A covering used on the rim of a pie crust to prevent its overbrowning

Pinwheel — A type of icebox cookie made from two or more colors of dough that have been layered and rolled

Popovers — Puffed up individual quick breads that are leavened primarily by the natural action of steam

Prebake — To bake a pie shell before the filling is added

Preheat — To heat an oven to the correct temperature before putting bread in to bake

Proof — To raise a yeast dough by putting it in a warm, moist place

Puff paste — A rich dough produced by layering butter or margarine between folds of dough and then rolling and folding the dough a set number of times

Punch — To press raised dough with your fist to force out extra gases trapped during the rising process

Quality — The established proper characteristics of the product

Quick breads — Varieties of bread products that are simple and quick to prepare, and that do not use yeast as a source of leavening action

Recipe — A list of ingredients and instructions for preparing a certain product

Reduce — To lessen in any way, as in size, weight, or amount

Rest — To let dough set after punching, scaling, and rounding; allows gluten strands to relax for ease in rolling and cutting

Retard — To slow down yeast action, usually by refrigerating or freezing

Rise — To increase in volume and become light and spongy

Roll — (noun) A small piece of baked, yeast-raised dough; (verb) to flatten a dough with a rolling pin

Rounding — The shaping of dough pieces to seal the ends

Scaling — Weighing ingredients or doughs with a scale

Scrape — To remove clinging dough from the sides and bottom of a mixing bowl or other container

Self-rising flour — All-purpose flour to which baking powder and salt have been added by the processor

Sheeting — In mixing dough, the point at which the dough pulls into long, flat strands

Shell — The finished bottom crust of a pie before the filling is added

Shortening cake — A cake that contains butter or special kind of shortening, as well as a chemical source of leavening, usually baking powder

Sift — To pass a dry ingredient or a mixture of dry ingredients through a sieve or sifter to blend the mixture and remove lumps

Soft wheat — A type of grain that contains less gluten than hard wheat and is commonly used to make delicate baked goods

Specialty flours — Special-purpose flours made from wheat grains and products other than wheat

Stabilizer — A substance added to beaten egg whites to keep the foam from losing its volume

Stamper — Utensil used to shape cookies by flattening them

Standardized — Uniform; something that does not vary

Standardized recipe — A recipe that has been tested to be of good quality, and if followed exactly, will give the same product every time

Steam — The leavening agent for puff paste and choux paste products

Stir — To mix with a circular motion

Substitute — Something used in place of another item

Sweet dough — A raised sweet yeast-dough enriched with sugar and eggs

Texture — The character of the internal cell structure of the product

Tough — Firm in texture; not easily chewed

Tube pan — A cake pan that has high sides and a tube in the center; used for baking foam cakes

Tubing — Passing soft dough or other mixtures through pastry bag tube for shaping or decorative purposes

Volume — The size of a product, especially in relation to its weight

Wash — To brush a liquid, such as eggs or milk, over the top of a product before it is baked

Weigh — To determine a specific amount of food by using scales

Whole wheat — Milled from whole, hard wheat kernels; contains all the vitamins and nutrients naturally present in wheat

Yeast — Group of one-celled microscopic plants which produce the leavening agent, carbon dioxide, in many baked products

Orientation Unit 1

Objective Sheet

Unit Objective

After completing this unit, the student should be able to assess the business opportunities and job requirements of personnel working in a bakery operation. The student will demonstrate these competencies by completing the assignment sheet and scoring a minimum of 85 percent on the written test.

Specific Objectives

After completing this unit, the student should be able to:

1. List businesses that employ bakery personnel.
2. Match bakery personnel job classifications with their descriptions.
3. Draw a career ladder for bakery personnel in large hotels and restaurants.
4. Select from a list general duties and responsibilities of bakery personnel.
5. List advantages and disadvantages of working in a bakery operation.
6. Complete a checklist on what is most important to you in a job. (Assignment Sheet 1)

Orientation Unit 1

Suggested Activities

Instructional Plan

1. Read the unit carefully and plan for instruction. Study the specific objectives to determine the order in which you will present them.
2. Review the teaching suggestions below, and plan classroom activities. Integrate workplace skills as they apply to your vocational program.
3. Plan your presentation to take advantage of student learning styles and to accommodate special needs students.
4. Obtain materials to supplement instruction of this unit. See ordering information in the "Suggested Supplemental Resources" section.
5. Review instructions for evaluating student outcomes/performance and make copies of unit evaluation form.
6. Provide students with unit of instruction.
7. Discuss unit and specific objectives.
8. Discuss assignment sheet and schedule due date. Review criteria for evaluation of assignment sheet.
9. Discuss student supplement, and assign as appropriate. Explain to students that supplement exercises are not evaluated.
10. Discuss the use of the unit evaluation form with the students, and select and discuss the rating scale that will be used for student evaluation.
11. Give written test.
12. Compile written test scores on the unit evaluation forms.
13. Reteach and retest as required.

Suggested Activities

Teaching Suggestions

Note: Skill areas appearing in bold face type in the Teaching Suggestions refer to the academic and workplace skills identified by the American Society for Training and Development (ASTD) and the U.S. Department of Labor. These have been adapted by MAVCC.

1. Arrange for a resource person, such as a hotel baker, to speak to the class on employment opportunities in the baking field. Skill areas: **listening, oral communication**
2. Take students on a field trip to observe both wholesale and retail baking operations. Skill area: **personal and career development**
3. Obtain current wage and benefit information for bakers in your area. Discuss with the class. Skill areas: **reading, math**
4. Provide students with a career ladder for a commercial bakery to compare with the hotel and restaurant career ladder in Information Sheet Objective 3. Skill area: **personal and career development**
5. Use Student Supplement 1 in this unit to provide a means of career guidance for your students. Skill area: **personal and career development**
6. Discuss health problems, irregular work hours, and other working conditions involved in a bakery job. Skill areas: **listening, oral communication**

Resources Used in Developing This Unit

1. Grimes, L.A. *Baker-Student Manual*. Austin, TX: Instructional Materials Center, University of Texas, 1977.
2. *Food Preparation for Food Service*. Cincinnati, OH: Educational Services, The Procter and Gamble Company, 1981.

Suggested Supplemental Resource

Order instructional materials, posters, charts, and pamphlets from:

Educational Services
The Procter and Gamble Company
P.O. Box 599
Cincinnati, OH 45201

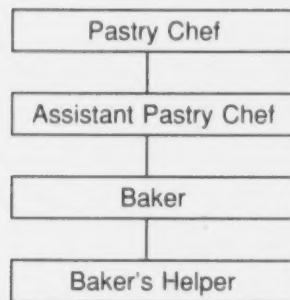
Orientation Unit 1

Answers to Written Test

1. Answer should include any four of the following:
- a. Small, single-shop retail bakeries
 - b. Central baking plant serving multiple retail outlets
 - c. Bakeries operated by grocery chain
 - d. Wholesale bakeries
 - e. Hotels and restaurants
 - f. Institutions such as schools and hospitals

2. a. 2
b. 4
c. 3
d. 1

3.



4. a, c, d, f
5. Answers should include any four of the following advantages and any two of the following disadvantages:
- a. Advantages
 - (1) Year-round employment
 - (2) Advancement through experience
 - (3) Mobility
 - (4) Self-employment
 - (5) Pleasant working conditions
 - (6) Fringe benefits
 - (7) High level of pay for skilled employees
 - b. Disadvantages
 - (1) May involve hard physical labor
 - (2) Uncomfortable working conditions
 - (3) Irregular working hours
 - (4) Ingredients handled may cause respiratory problems

**Orientation
Unit 1**

Written Test

Name _____ Score _____

1. List four businesses that employ bakery personnel.

- a. _____
- b. _____
- c. _____
- d. _____

2. Match bakery personnel job classifications with their definitions. Write the correct numbers in the blanks.

- | | | |
|----------|---|--|
| _____ a. | Bakes all the breads, rolls, hot breads, and muffins; regulates temperature of ovens; sets and punches the dough; and has full responsibility for the operation of the bakery department | 1. Pastry chef |
| _____ b. | Is under the direct supervision of the pastry chef and is in full charge of production; makes all cakes, cookies, pies, puddings, French pastry, and other items found on the dessert menu | 2. Baker |
| _____ c. | Assists the baker in scaling off ingredients; prepares baking sheets, muffin tins, and bread pans; keeps pastry cloths and bread boxes clean; and keeps the bake shop clean and orderly | 3. Baker's helper
(baker's assistant) |
| _____ d. | Supervises the pastry department, writes the dessert menus, requisitions materials, schedules the work for assistants, decorates cakes, makes ornamental pieces, works on new recipes, and figures production costs | 4. Assistant pastry chef |

Written Test

3. Draw a career ladder for bakery personnel in large hotels or restaurants.
4. Select from a list general duties and responsibilities of bakery personnel. Write an "X" in the blank before each duty or responsibility.
- _____ a. Preparing convenience bakery items
 - _____ b. Purchasing appropriate ingredients or substituting recipe ingredients
 - _____ c. Selling products as necessary
 - _____ d. Preparing a standard product by following standardized recipes
 - _____ e. Decorating or garnishing delicatessen products and other food items in addition to bakery products
 - _____ f. Preparing decorative showpieces and arranging bakery items attractively
 - _____ g. Comparing various forms of bakery products to determine and control cost, quality, and customer acceptance
 - _____ h. Preparing different types of desserts to meet specified calorie counts
 - _____ i. Avoiding using leftovers whenever possible
 - _____ j. Selecting meats and vegetables according to desired use and preparing meats and vegetables to meet standard criteria

Written Test

5. List four advantages and two disadvantages of working in a bakery operation.

a. Advantages

(1) _____

(2) _____

(3) _____

(4) _____

b. Disadvantages

(1) _____

(2) _____

*Permission to duplicate this test is granted.

**Orientation
Unit 1**

Unit Evaluation Form

Student Name _____ Unit Rating _____

Assignment Sheet 1—Complete a Checklist on What is Most Important
to You in a Job Rating _____

Comments: _____

Written Test Scores

Pretest _____ Posttest _____ Other _____

Other _____

Teacher Signature _____ Date _____

Student Signature _____ Date _____

*Permission to duplicate this form is granted.

Orientation Unit 1

Information Sheet

1. Businesses that employ bakery personnel

- a. Small, single-shop retail bakeries
- b. Central baking plant serving multiple retail outlets
- c. Bakeries operated by grocery chain
- d. Wholesale bakeries
- e. Hotels and restaurants
- f. Institutions such as schools and hospitals

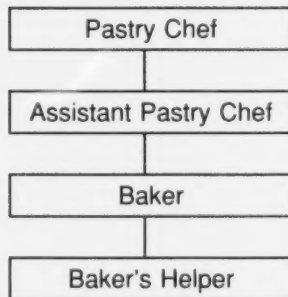
2. Job classifications of bakery personnel

- a. **Baker's helper (baker's assistant)** — Assists the baker in scaling off ingredients; prepares baking sheets, muffin tins, and bread pans; keeps pastry cloths and bread boxes clean; and keeps the bake shop clean and orderly
- b. **Baker** — Bakes all the breads, rolls, hot breads, and muffins; regulates temperature of ovens; sets and punches the dough; has full responsibility for the operation of the bakery department
- c. **Assistant pastry chef** — Is under the direct supervision of the pastry chef and is in full charge of production; makes all cakes, cookies, pies, puddings, French pastry, and other items on the dessert menu
- d. **Pastry chef** — Supervises the pastry department, writes the dessert menus, requisitions materials, schedules the work for assistants, decorates cakes, makes ornamental pieces, works on new recipes, and figures production costs

Information Sheet

3. Career ladder for bakery personnel in large hotels or restaurant operations (Figure 1)

Figure 1

**4. General duties and responsibilities of bakery personnel**

- a. Selecting appropriate ingredients or substituting recipe ingredients
- b. Preparing a standard product by following standardized recipe
- c. Selecting fruits according to desired use, and preparing fruit to meet standard criteria
- d. Preparing breads and rolls from batters and doughs
- e. Preparing different types of desserts to meet quality standards
- f. Comparing various forms of bakery products to determine and control costs, quality, and customer acceptance
- g. Portioning bakery products as necessary
- h. Preparing convenience bakery items
- i. Comparing quality and cost of convenience bakery items to that of similar products produced from standardized recipes, and judging their value to the total operation
- j. Using leftovers when possible
- k. Preparing decorative showpieces
- l. Arranging bakery items attractively
- m. Decorating or garnishing bakery items as required

Information Sheet

5. Advantages and disadvantages of working in a bakery operation

a. Advantages

- Year-round employment
 - Advancement through experience
 - Mobility
 - Self-employment
 - Pleasant working conditions
 - Fringe benefits
- Examples: Paid vacation, bonuses, profit sharing
- High level of pay for skilled employees

b. Disadvantages

- May involve hard physical labor
 - Uncomfortable working conditions
- Note: Work near ovens can be hot, especially in the summer.
- Irregular working hours
- Note: This may also be an advantage in that it commands higher wages.
- Ingredients handled may cause respiratory problems
- Example: Inhaled flour dust

Orientation Unit 1

Student Supplement 1—Interview a Baker to Learn About the Baking Profession

Name _____

Arrange with your instructor to interview a baker in a wholesale or retail baking operation in your area. Write the responses to your interview questions in a notebook so that you can report your findings to the class. Learn about the baking operation by asking your own and the following questions.

1. What is your exact job title?
2. What are your job responsibilities?
3. How did you find your job?
4. Does your job require a high school diploma? What special training did you need to qualify for the job? Where did you get this training?
5. What do employers look for in a person who is looking for a job like this?
6. Did you have other jobs in food service before this one? If so, what were they?
7. How long have you been with this operation? Have you worked at the same job level for the entire time that you've been employed here?
8. What fringe benefits do you receive by working for this operation? (For example, paid vacations, health and dental insurance, paid education, etc.)
9. Are other jobs like yours available? If so, how would you recommend learning about them?
10. What do you see as the advantages and disadvantages of your job?
11. What advice would you give a young person who wanted to train for a job like yours?

Orientation Unit 1

Assignment Sheet 1—Complete a Checklist on What is Most Important to You in a Job

Name _____ Overall Rating _____

Evaluation criteria	Rating
Followed directions	_____
Answered questions	_____
Logical reasons given	_____

People have many different ideas about what is important in a job. Look over the list below and check the column that best describes your opinion. In the last column, rank the items from 1 (very important) to 16 (least important).

Aspects of a Job	Very Important	Somewhat Important	Not Important at All	Undecided	Rank
A high salary					
Interesting, enjoyable work					
Plenty of vacation					
A chance to help other people					
Regular working hours					
A chance to be promoted					
Job security					
Job duties spelled out clearly					
Friendly coworkers					
Pleasant surroundings					
A good boss					
The chance to supervise other people					
Good health insurance and benefits					

Assignment Sheet 1

Aspects of a Job	Very Important	Somewhat Important	Not Important at All	Undecided	Rank
The chance to continue education					
A variety of responsibilities					
The chance to be creative					

1. What items were most important to you? Why?

2. How does your list compare with the advantages and disadvantages listed in the information sheet?

3. List some jobs in baking that you think might suit you.

Basic Baking Ingredients Unit 2

Objective Sheet

Unit Objective

After completing this unit, the student should be able to identify basic baking ingredients and their storage requirements. The student should demonstrate these competencies by completing the assignment sheets and scoring a minimum of 85 percent on the written test.

Specific Objectives

After completing this unit, the student should be able to:

1. Match terms related to baking ingredients with their definitions.
2. List common types of baking ingredients.
3. Match basic baking ingredients with their purposes.
4. Match terms related to ingredient quality, receiving, and storage with their definitions.
5. Select from a list labeling requirements for food products.
6. List information that must be specified when ordering food products.
7. Arrange in order the procedures for receiving food.
8. Select from a list dry storage requirements.
9. Distinguish among types of dry storeroom items.
10. Select facts about cleaning and exterminating supplies.
11. Select from a list duties of storeroom personnel.
12. State the purpose of a storeroom food requisition.
13. List refrigerated storage requirements.
14. Select from a list general practices and procedures for refrigerated storage.
15. Select from a list storage requirements for basic baking ingredients.
16. Arrange food products using the FIFO rotation system. (Assignment Sheet 1)
17. Complete a food requisition form. (Assignment Sheet 2)

Basic Baking Ingredients Unit 2

Suggested Activities

Instructional Plan

1. Read the unit carefully and plan for instruction. Study the specific objectives to determine the order in which you will present them.
2. Review the teaching suggestions below, and plan classroom activities. Integrate workplace skills as they apply to your vocational program.
3. Plan your presentation to take advantage of student learning styles and to accommodate special needs students.
4. Obtain materials to supplement instruction of this unit. See ordering information in the "Suggested Supplemental Resources" section.
5. Review instructions for evaluating student outcomes/performance and make copies of the unit evaluation form.
6. Provide students with unit of instruction.
7. Discuss unit and specific objectives
8. Discuss assignment sheets, and schedule due dates. Review criteria for evaluation of assignment sheets.
9. Discuss the use of the Unit Evaluation Form with the students, and select and discuss the rating scale that will be used for student evaluation.
10. Give written test.
11. Compile written test scores on the Unit Evaluation Form.
12. Reteach and retest as required.

Suggested Activities

Teaching Suggestions

Note: Skill areas appearing in boldface type in the Teaching Suggestions refer to the academic and workplace skills identified by the American Society for Training and Development (ASTD) and the U.S. Department of Labor. These have been adapted by MAVCC.

1. Gather and display samples of various types of flours, leavening agents, and fats or shortenings so that students can compare. Show the differences in appearance, touch, and taste. Skill area: **science**
2. Discuss and demonstrate differences in methods of leavening. Skill area: **science**
3. Arrange for students to visit a bakery operation that maintains an approved food storage program. Skill area: **personal and career development**
4. Display baking ingredients in their packages, and show students how the manufacturer complies with labeling requirements mandated by law. Skill area: **reading**
5. Discuss labeling such as "No Cholesterol" "Fat Free" and "Low Salt." Skill area: **science**

Resources Used in Developing This Unit

1. Amendola, Joseph. *The Baker's Manual for Quantity Baking and Pastry Making*, 3rd ed. Jenks, OK: Williams Book Company.
2. Amendola, Joseph and Donald Lundberg. *Understanding Baking*. Boston: CBI Publishing Company, Inc.
3. Grimes, L. A. *Baker Student Manual*. Austin, TX: Instructional Materials Center, University of Texas.

Suggested Supplemental Resource

Contact manufacturers of basic ingredients for information to distribute to students.

Suggested Activities

Instructions For Evaluating Student Performance

When the student is ready to perform a specific task, obtain a copy of the job sheet which may be found in either the teacher or student edition. Then observe the student performing the procedure.

Process evaluation—Place a mark in the box to the left of each designated checkpoint if the student has satisfactorily achieved the step(s) for each checkpoint area. If the student is unable to correctly complete the procedure, have the student review the materials and try again.

Product evaluation—Once the student has satisfactorily completed the procedure, rate the student product (outcome) using the criteria which have been provided as part of the job sheet. If the student's product is unacceptable, have the student review the materials and submit another product for evaluation.

Sample performance evaluation keys have been provided below. Many other keys are available. Select one rating (grading scale) which best fits your program needs.

Option A

- 4 - Skilled—Can perform job with no additional training.
- 3 - Moderately skilled—Has performed job during training program; limited additional training may be required.
- 2 - Limited skill—Has performed job during training program; additional training is required to develop skill.
- 1 - Unskilled—Is familiar with process, but is unable to perform job.

Option B

- Yes—Can perform job with no additional training.
- No—Is unable to perform job satisfactorily.

Basic Baking Ingredients Unit 2

Answers to Assignment Sheets

Assignment Sheet 1

6/19	11/19	5/7	12/1	10/2
4/16	11/12	4/9	9/9	4/8
2/26	7/9	3/6	9/9	3/7
			1/2	3/6
			1/2	3/6

Assignment Sheet 2

Storeroom Requisition		
Name of Station <u>Bakery</u>		
Date Needed <u>March 17</u>		Signature <u>E. M. Cook</u>
Quantity	Description and Use	Cost
12	Eggs	
1 lb.	Fat	
¼ c.	Vanilla	
8 oz.	Cocoa	
12 oz.	Nuts	

Basic Baking Ingredients Unit 2

Answers to Written Test

- | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|
| 1. | a. | 15 | e. | 5 | i. | 9 | m. | 12 |
| | b. | 16 | f. | 11 | j. | 1 | n. | 6 |
| | c. | 8 | g. | 3 | k. | 14 | o. | 10 |
| | d. | 2 | h. | 13 | l. | 7 | p. | 4 |

2. Any two for each of the following:

a. Flour

- (1) Bread flour
- (2) All-purpose flour
- (3) Cake flour
- (4) Pastry flour
- (5) Whole wheat flour
- (6) Specialty flours

b. Eggs

- (1) Whole
- (2) Egg whites
- (3) Egg yolks

c. Salt

- (1) Fine
- (2) Coarse

d. Milk and other liquids

- (1) Whole milk
- (2) Skim milk
- (3) Buttermilk
- (4) Evaporated and condensed milk
- (5) Water
- (6) Fruit juices

Answers to Written Test

e. Sugar and other sweeteners

- (1) Granulated sugar
- (2) Powdered or confectioners sugar
- (3) Brown sugar
- (4) Honey
- (5) Molasses
- (6) Corn syrup
- (7) Maple syrup
- (8) Glucose

f. Leavening agents

- (1) Yeast
 - (a) Dried
 - (b) Compressed
- (2) Baking powder
- (3) Baking soda

g. Fats, shortenings, and oils

- (1) All-purpose
- (2) Emulsified or high ratio
- (3) Vegetable oils
- (4) Butter or margarine
- (5) Lard
- (6) Roll-in shortening

h. Flavoring materials

- (1) Extracts
- (2) Spices
- (3) Chocolate and cocoa

- | | | | | |
|----|----|---|----|----|
| 3. | a. | 3 | f. | 10 |
| | b. | 9 | g. | 6 |
| | c. | 4 | h. | 8 |
| | d. | 1 | i. | 5 |
| | e. | 2 | j. | 7 |

- | | | | | | | | | |
|----|----|----|----|----|----|----|----|---|
| 4. | a. | 6 | e. | 11 | h. | 12 | k. | 1 |
| | b. | 10 | f. | 13 | i. | 2 | l. | 8 |
| | c. | 3 | g. | 4 | j. | 9 | m. | 5 |
| | d. | 7 | | | | | | |

5. a, c, d, f, g, i

Answers to Written Test

6. a. Name of item
b. Quantity of item needed
c. Grade or brand wanted
d. Size or number of items per package
e. Unit size on which price is based
f. Additional factors such as count size, drained weight, style, packing medium
7. a. 3
b. 1
c. 4
d. 2
e. 5
8. b, c, e, h
9. a. NF e. NP i. NP
b. NP f. NF j. NP
c. P g. P k. NF
d. NP h. NF l. NP
10. a. 1
b. 3
c. 2
d. 4
11. a, d, f, h, i, j
12. To control food issues and provide reordering information
13. Any three of the following:
a. Convenient location in or near production area to save time and labor
b. Adequate storage space for type of operation and delivery schedule
c. Clean, sanitary shelving and interior
d. Arrangements for air circulation between items at all times
e. Properly maintained temperature
14. a, c, e, f, h
15. a. 1 d. 4
b. 2 e. 2
c. 4 f. 2

Basic Baking Ingredients Unit 2

Written Test

Name _____ Score _____

1. Match terms related to baking ingredients with their definitions. Write the correct numbers in the blanks.

- | | | |
|----------|---|--------------------------------|
| _____ a. | Milled from whole, hard wheat kernels; contains all the vitamins and nutrients naturally present in wheat | 1. Gluten |
| _____ b. | All-purpose flour to which baking powder and salt have been added by processor | 2. Hard wheat |
| _____ c. | A substance that forms the gas responsible for leavening | 3. Yeast |
| _____ d. | A type of grain that contains a high proportion of gluten and is excellent for breads and rolls | 4. Absorption |
| _____ e. | Milled, unenriched soft wheat | 5. Cake flour |
| _____ f. | Special-purpose flours made from wheat grains and products other than wheat | 6. Soft wheat |
| _____ g. | Group of one-celled microscopic plants that produce the leavening agent, carbon dioxide, in many baked products | 7. Pastry flour |
| _____ h. | A blend of milled hard and soft wheats | 8. Leavening agent |
| _____ i. | Flour to which various amounts of nutrients have been added within limits specified by the government | 9. Enriched flour |
| _____ j. | An elastic substance formed when flour and water are mixed; provides baked products with strength | 10. Carbon dioxide |
| | | 11. Specialty flours |
| | | 12. Bread flour (patent flour) |
| | | 13. All-purpose flour |

Written Test

- _____ k. A gas such as air, steam, or carbon dioxide that, when trapped in a dough or batter and heated, causes the product to increase in volume or rise
- _____ l. Milled soft wheat
- _____ m. Milled hard wheat
- _____ n. A type of grain that contains less gluten than hard wheat and is commonly used to make delicate baked goods
- _____ o. A leavening agent formed when yeast, baking powder, or baking soda is used in a recipe
- _____ p. The ability of flour and other dry ingredients to take in and hold liquids

14. Leavening
15. Whole wheat flour
16. Self-rising flour

2. List two common types of each basic baking ingredient.

- | | |
|---|--|
| <p>a. Flour</p> <p>(1) _____</p> <p>(2) _____</p> | <p>b. Eggs</p> <p>(1) _____</p> <p>(2) _____</p> |
| <p>c. Salt</p> <p>(1) _____</p> <p>(2) _____</p> | <p>d. Milk and other liquids</p> <p>(1) _____</p> <p>(2) _____</p> |
| <p>e. Sugar and other sweeteners</p> <p>(1) _____</p> <p>(2) _____</p> | <p>f. Leavening agents</p> <p>(1) _____</p> <p>(2) _____</p> |
| <p>g. Fats, shortenings, and oils</p> <p>(1) _____</p> <p>(2) _____</p> | <p>h. Flavoring materials</p> <p>(1) _____</p> <p>(2) _____</p> |

Written Test

3. Match basic baking ingredients with their purposes. Write the correct numbers in the blanks.

- | | | |
|----------|---|-------------------------------|
| _____ a. | Add color, improve grain and texture, give structure, add flavor, increase volume, and add considerable nutritional value | 1. Flour |
| _____ b. | Provide sweet taste, improve flavor, affect tenderness, aid in crust coloring, improve shelf life, serve as base for icings and toppings, and serve as yeast food in yeast products | 2. Salt |
| _____ c. | Increase volume, improve grain and texture, and improve flavor | 3. Eggs |
| _____ d. | Provides structure, acts as a binding and an absorbing agent, affects shelf life, adds nutritional value, adds flavor | 4. Leavening agents |
| _____ e. | Brings out desired flavor, controls yeast action, strengthens gluten in flour, and improves texture and grain | 5. Fats and shortenings |
| _____ f. | Produce desired flavors | 6. Milk and other liquids |
| _____ g. | Affect texture, add nutritional value, affect shelf life, improve flavor, dissolve dry ingredients, make uniform blending possible, aid in leavening | 7. Coloring materials |
| _____ h. | Retard destructive organisms, spoilage, and staleness | 8. Preservatives |
| _____ i. | Increase tenderness, increase shelf life and eating quality, enhance nutritional value, and improve grain and texture | 9. Sugar and other sweeteners |
| _____ j. | Produce desired colors | 10. Flavoring materials |

Written Test

4. Match the terms related to ingredient quality, receiving, and storage with their definitions. Write the correct numbers in the blanks.

- | | | |
|----------|--|------------------------------|
| _____ a. | Storage area for nonperishable food and nonfood items | 1. Standard |
| _____ b. | A list of all received food items found in the storeroom | 2. Shelf life |
| _____ c. | Size or quantity of a product | 3. Unit |
| _____ d. | A written request for food items to be obtained from storage | 4. Perishable |
| _____ e. | Foods that have a long shelf life and will keep almost indefinitely | 5. Quantity |
| _____ f. | The person in charge of the storeroom | 6. Dry storage |
| _____ g. | Foods that have a short shelf life because of their susceptibility to invasion by bacteria, molds, yeasts, and spoilage | 7. Requisition |
| _____ h. | Factors such as appearance, taste, and texture that affect eating satisfaction | 8. First in/First out policy |
| _____ i. | The amount of time you can reasonably expect a product to maintain its quality if proper storage procedures are followed | 9. Refrigerated storage |
| _____ j. | A storage area kept at a temperature range of 32°F to 40°F for perishable items | 10. Storeroom receiving log |
| _____ k. | Uniform, nonvarying measurement used to evaluate quality, weight, value, or quantity | 11. Nonperishable |
| _____ l. | Food received first should be used first | 12. Quality standard |
| _____ m. | A determined or estimated amount | 13. Storeroom clerk |

Written Test

5. Select from a list labeling requirements for food products. Write an "X" in the blank before each requirement.

- _____ a. Product identification indicating exactly what is contained with no misrepresentation
- _____ b. Ingredients listed in order, with least amount (by weight) first
- _____ c. Identification of additives
- _____ d. Net weight of contents
- _____ e. Amount of calories per serving
- _____ f. Federal inspection stamp
- _____ g. Name and address of packer, distributor, or manufacturer
- _____ h. Amount of cholesterol per serving
- _____ i. Descriptive labeling
- _____ j. Projected shelf life of product

6. List information that must be specified when ordering food products.

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____
- f. _____

Written Test

7. Arrange in order the procedures for receiving food. Write a "1" before the first step, a "2" before the second step, and so on.
- ☐ a. Accept merchandise: Sign the invoice; return a copy of the invoice to the deliverer.
 - ☐ b. Check invoice: Check count on invoice; check count or weight actually delivered.
 - ☐ c. Store items promptly: Store perishable items first; store items in the proper storage area; check for wholesomeness of product.
 - ☐ d. Inspect merchandise: Make sure that it agrees with purchase order; make sure that it agrees with specifications.
 - ☐ e. List on storeroom receiving log all items received.
8. Select from a list dry storage requirements. Write an "X" in the blank before each requirement.
- ☐ a. Dim lighting
 - ☐ b. Well ventilated
 - ☐ c. Dry
 - ☐ d. Warm temperature
 - ☐ e. Free of insects and rodents
 - ☐ f. Dirty
 - ☐ g. Random arrangement
 - ☐ h. Well managed
 - ☐ i. Shelving 10 inches off floor and 6 inches from wall

Written Test

9. Distinguish among types of dry storeroom items. Write "NP" before nonperishable items, "P" before perishable items, and "NF" before nonfood items.

- _____ a. Insecticides, rodenticides, and caustic cleaning agents
- _____ b. Canned goods
- _____ c. Fresh vegetables
- _____ d. Flour
- _____ e. Cereals
- _____ f. Cleaning supplies
- _____ g. Bread
- _____ h. Paper goods
- _____ i. Spices
- _____ j. Sugar
- _____ k. Reserve supplies of utensils and dishes
- _____ l. Shortening and oil in sealed cans
- _____ m. Fresh fruit

10. Select facts about cleaning and exterminating materials. Write the correct numbers in the blanks.

- _____ a. How should cleaning supplies, insecticides, rodenticides, and caustic cleaning agents be stored?
 - 1. In a separate room or locked cabinet away from foods
 - 2. In labeled coffee cans on the bottom storage shelf
 - 3. On a separate shelf in the food storage area
 - 4. In the kitchen, under the sink; never in the food storage area
- _____ b. Who should have access to the contents of cleaning and exterminating materials?
 - 1. All kitchen employees
 - 2. Only the baker or pastry chef
 - 3. Only qualified personnel
 - 4. All bakery personnel

Written Test

- _____ c. How should containers of cleaning and exterminating materials be marked?
1. Bar coded and inventoried
 2. Clearly named and identified for use
 3. Numbered and coded for use
 4. Lettered and alphabetized
- _____ d. When should bakery personnel handle the cleaning and exterminating materials?
1. Whenever necessary as long as they wash their hands beforehand
 2. Only in the evening after baking duties are finished
 3. Early in the morning before the morning shift arrives and baking duties begin
 4. Only when necessary
11. Select from a list the duties of storeroom personnel. Write an "X" in the blank before each duty.
- _____ a. Keep the storeroom clean.
- _____ b. Do not inspect shipments.
- _____ c. Place food in storerooms whenever you have time.
- _____ d. Date all packages.
- _____ e. Stack food where there is room.
- _____ f. Use FIFO rotation system.
- _____ g. Issue items to whomever wants them.
- _____ h. Take inventories as required.
- _____ i. Check storeroom contents frequently for damage or spoilage, broken or torn packages, and bulging or leaking cans.
- _____ j. Use spoiled or damaged items immediately.
12. State the purpose of a storeroom food requisition.
- _____

Written Test

13. List three refrigerated storage requirements.

a. _____

b. _____

c. _____

14. Select from a list general practices and procedures for refrigerated storage. Write an "X" in the blank before each correct practice or procedure.

- _____ a. Inspect deliveries before refrigerating.
- _____ b. Refrigerate deliveries when you have time.
- _____ c. Cover processed foods and leftovers to prevent drying, odor transfer, and contamination.
- _____ d. Store highly perishable foods and potentially hazardous foods in warmest areas of refrigerator.
- _____ e. Store foods with strong odors in sealed containers.
- _____ f. Wipe up spilled food immediately.
- _____ g. Always put hot foods in the refrigerator immediately.
- _____ h. Check refrigerator temperature frequently.
- _____ i. Crowd items for quickest cooling.
- _____ j. Refrigerate in original wrapping whenever possible.

15. Select facts about storage requirements for basic baking ingredients. Write the correct numbers in the blanks.

- _____ a. Which of the following may be stored at room temperature in tightly closed containers?
1. Flours, cereals, sugars, and spices
 2. Fluid milk, buttermilk, and cream
 3. Dry yeast
 4. Compressed yeast

Written Test

- _____ b. Which of the following may be stored under refrigeration within the limits of its shelf life?
1. Dry yeast
 2. Compressed yeast
 3. Unopened canned milk and nonfat dry milk
 4. Flours, cereals, sugars, and spices
- _____ c. Which of the following may be stored for several months in a cool, dry place?
1. Canned milk and nonfat dry milk
 2. Opened canned milk
 3. Compressed yeast
 4. Dry yeast
- _____ d. Which of the following may be held at room temperature for several months?
1. Unopened fluid milk, buttermilk, and cream
 2. Compressed yeast
 3. Dry yeast
 4. Unopened canned milk and nonfat dry milk
- _____ e. Which of the following must be stored in closed containers under refrigeration?
1. Flours, cereals, sugars, and spices
 2. Fluid milk, buttermilk, and cream
 3. Dry yeast
 4. Compressed yeast
- _____ f. Which of the following must be refrigerated after being opened?
1. Flours
 2. Canned milk and nonfat dry milk
 3. Spices
 4. Cereals

*Permission to duplicate this test is granted.

**Basic Baking Ingredients
Unit 2**

Unit Evaluation Form

Student Name _____ Unit Rating _____

Assignment Sheet 1—Arrange Food Products Using the FIFO
Rotation System Rating _____

Comments: _____

Assignment Sheet 2—Complete a Food Requisition Form Rating _____

Comments: _____

Written Test Scores

Pretest _____ Posttest _____ Other _____

Other _____

Teacher Signature _____ Date _____

Student Signature _____ Date _____

*Permission to duplicate this form is granted.

Basic Baking Ingredients Unit 2

Information Sheet

1. Terms related to basic baking ingredients

- a. **Absorption** — The ability of flour and other dry ingredients to take in and hold liquids

- b. **All-purpose flour** — A blend of milled hard and soft wheats

- c. **Bread flour** — Milled hard wheat

Note: This type of flour is generally used for most breads and rolls.

- d. **Cake flour** — Milled, unenriched soft wheat

Note: This type of flour is very fine and uniform, and makes tender, delicate cakes.

- e. **Carbon dioxide** — A leavening agent formed when yeast, baking powder, or baking soda is used in a recipe

Note: To form carbon dioxide, baking soda requires an acid ingredient.

- f. **Enriched flour** — Flour to which various amounts of nutrients have been added within limits specified by the government

- g. **Gluten** — An elastic substance formed when flour and water are mixed; provides baked products with strength

- h. **Hard wheat** — A type of grain that contains a high proportion of gluten and is excellent for breads and rolls

- i. **Leavening** — A gas such as air, steam, or carbon dioxide that, when trapped in a dough or batter and heated, causes the product to increase in volume or rise

Note: Leavening is the same as rising.

- j. **Leavening agent** — A substance that forms the gas responsible for leavening

Examples: Baking powder, baking soda, yeast

Information Sheet

- k. **Pastry flour** — Milled soft wheat

Note: This type of flour is used in bakeries for lighter varieties of pie crusts, cookies, and pastries.

- l. **Self-rising flour** — All-purpose flour to which baking powder and salt have been added by the processor

Note: The usual proportion is 1½ teaspoons baking powder and ½ teaspoon salt to 1 cup of flour. This type of flour is used for biscuits and other quick breads.

- m. **Soft wheat** — A type of grain that contains less gluten than hard wheat and is commonly used to make delicate baked goods

- n. **Specialty flours** — Special-purpose flours made from wheat grains and products other than wheat

Examples: Rice flour, rye flour, potato flour, clear flour

- o. **Whole wheat** — Milled from whole, hard wheat kernels; contains all the vitamins and nutrients naturally present in wheat

Note: This type of flour is higher in fat content than other flours and requires special storage in cool places. Bolted whole wheat is also available. It is processed further to eliminate the need for refrigeration.

- p. **Yeast** — Group of one-celled microscopic plants that produce the leavening agent, carbon dioxide, in many baked products

Note: There are two forms of yeast available: dry granular and compressed.

2. **Common types of basic baking ingredients**

- a. **Flours**

- Bread flour
- All-purpose flour
- Cake flour
- Pastry flour
- Whole wheat flour
- Specialty flours

Information Sheet**b. Eggs**

Note: All egg forms are available fresh, dried, or frozen.

- Whole
- Egg whites
- Egg yolks

c. Salt

- Fine
- Coarse

d. Milk and other liquids

- Whole milk
- Skim milk
- Buttermilk

Note: All of the above type of milk are available fresh, dried, canned, or frozen.

- Evaporated and condensed milk
- Water
- Fruit juices

e. Sugar and other sweeteners

- Granulated sugar
- Powdered or confectioners sugar
- Brown sugar
- Honey
- Molasses
- Corn syrup
- Maple syrup
- Glucose

Information Sheet

f. Leavening agents

- Dried or compressed yeast
- Baking powder
- Baking soda

g. Fats, shortenings, and oils

- All-purpose fat
- Emulsified or high ratio fat
- Vegetable oils
- Butter or margarine
- Lard
- Roll-in shortening

Examples: Danish, puff paste

h. Flavoring materials

- Extracts
- Spices
- Herbs
- Seeds
- Chocolate and cocoa

3. Basic baking ingredients and their purposesa. **Flour**

- Provides structure
- Acts as a binding and an absorbing agent
- Affects shelf life
- Adds flavor
- Adds nutritional value

Information Sheet**b. Eggs**

- Add color
- Improve grain and texture
- Increase volume
- Give structure
- Add flavor
- Add considerable nutritional value

c. Salt

- Brings out desired flavor
- Controls yeast action

Note: An excessive amount of salt decreases or kills the activity of the yeast.

- Strengthens gluten in flour
- Improves texture and grain

d. Milk and other liquids

- Affect texture
- Add nutritional value
- Affect shelf life
- Improve flavor
- Dissolve dry ingredients
- Make uniform blending possible
- Aid in leavening

Information Sheet

- e. **Sugar and other sweeteners**
 - Provide sweet tastes
 - Improve flavor
 - Affect tenderness
 - Aid in crust coloring
 - Improve shelf life
 - Serve as base for icings and toppings
 - Serve as yeast food in yeast products
 - f. **Leavening agents**
 - Increase volume
 - Improve grain and texture
 - Improve flavor
 - g. **Fats and shortenings**
 - Increase tenderness
 - Increase shelf life and eating quality
 - Enhance nutritional value
 - Improve grain and texture
 - h. **Flavoring materials** —Produce desired flavors
 - i. **Coloring materials**—Produce desired colors
 - j. **Preservatives**—Retard destructive organisms, spoilage, and staleness
4. **Terms related to ingredient quality, receiving, and storage**
- a. **Dry storage** — Storage area for nonperishable food and nonfood items
 - b. **First in/First out (FIFO) policy** — Food received first should be used first
 - c. **Nonperishable** — Foods that have a long shelf life and will keep almost indefinitely

Information Sheet

- d. **Perishable** — Foods that have a short shelf life because of their susceptibility to invasion by bacteria, molds, yeasts, and spoilage
- e. **Quality standard** — Factors such as appearance, taste, and texture that affect eating satisfaction
- f. **Quantity** — A determined or estimated amount
- g. **Refrigerated storage** — A storage area kept at a temperature range of 32°F to 40°F for perishable items
 Note: Freezer temperature is 0°F to 10°F.
- h. **Requisition** — A written request for food items to be obtained from storage
- i. **Shelf life** — The amount of time you can reasonably expect a product to maintain its quality if proper storage procedures are followed
 Note: Product expiration dates should be checked to determine shelf life.
- j. **Standard** — Uniform, nonvarying measurement used to evaluate quality, weight, value, or quantity
- k. **Storeroom clerk** — The person in charge of the storeroom
- l. **Storeroom receiving log** — A list of all received food items found in the storeroom
- m. **Unit** — Size or quantity of a product
 Examples: Pound, ounce, can-size, number (dozen, 16)

5. Labeling requirements for food products

Note: These are mandatory requirements under the Standard of Identity established by the Food and Drug Administration.

- a. Produce identification indicating exactly what is contained with no misrepresentation
- b. Ingredients listed in order, with least amount (by weight) first
- c. Identification of additives
- d. Net weight of contents
- e. Federal inspection stamp

Information Sheet

- f. Name and address of packer, distributor, or manufacturer

Note: This information may be included as part of an inspection stamp in establishment code.

- g. Descriptive labeling

Note: This information may be included voluntarily by the packer or manufacturer.

6. Food specification information

- a. Name of item
- b. Quantity of item needed
- c. Grade or brand wanted
- d. Size or number of items per package
- e. Unit size on which price is based
- f. Additional factors such as count size, drained weight, style, packing medium

7. Procedures for receiving food

- a. Check invoice.
 - Check invoice count.
 - Check count or weight actually delivered.
- b. Inspect merchandise.
 - Make sure that it agrees with purchase order.
 - Make sure that it agrees with specifications.
 - Check for wholesomeness of product.
- c. Accept merchandise.
 - Sign the invoice.
 - Return a copy of the invoice to the deliverer.

Information Sheet

- d. Store items promptly.
 - Store perishable items first.
 - Store items in the proper storage area.
- e. List on storeroom receiving log all items received.

8. Dry storage requirements

- a. Well lighted
- b. Well ventilated
- c. Dry
- d. Temperatures between 50°F and 75°F

Note: Cool temperatures preserve flavor and nutritional value and reduce food spoilage.

- e. Shelving 6 inches off floor and 12 inches from wall

Note: Independent shelving prevents contamination by floor soil or water and allows for cleaning underneath.

- f. Free of insects and rodents
- g. Clean
- h. Arranged in an orderly manner for accessibility
- i. Well managed

9. Dry storeroom contents

- a. Nonperishable items
 - Canned goods
 - Flour
 - Cereals
 - Spices
 - Sugar
 - Shortening and oil in sealed cans

Information Sheet

b. Perishable items

- Fresh vegetables
- Bread
- Fresh fruit

c. Nonfood items

Note: Nonfood items should be stored in an area separate from food.

- Paper goods
- Reserve supplies of utensils and dishes
- Cleaning supplies
- Insecticides, rodenticides, and caustic cleaning agents

10. Storage requirements for cleaning and exterminating materials

- a. Store in a separate room or locked cabinet away from food items.
- b. Provide access to contents only to qualified personnel.
- c. Make sure that all containers are clearly named and identified for use.
- d. Handle materials only when necessary.
- e. Store only in original containers.

11. Duties of storeroom personnel

- a. Keep the storeroom clean.

Note: Follow a schedule for cleaning tables and shelves, sweeping, and mopping.

- b. Inspect all shipments for damage, rodent or vermin infestation, and spoilage.

Note: If the shipment is bad, notify the purveyor and return the goods. Obtain a credit memo, and ask the receiving station to check shipments better.

- c. Place food in storerooms as quickly as possible.
- d. Date all packages.

Information Sheet

- e. Stack food in proper location for good organization.

Note: Cross stack large bags of products for stability and to allow air to circulate.

- f. Use FIFO rotation system. (Assignment Sheet 1)
- g. Issue items only upon receipt of proper requisition. (Assignment Sheet 2)
- h. Take inventories as required.
- i. Check storeroom contents frequently for damage or spoilage, broken or torn packages, and bulging or leaking cans.
- j. Remove spoiled or damaged items immediately and notify manager.
- k. After spoilage has been found, clean the area immediately to prevent contamination of other foods.

12. Purpose of a storeroom food requisition—To control food issues and provide reordering information

Note: A requisition includes the name, amount, and size of the desired item.

13. Refrigerated storage requirements

- a. Convenient location in or near production area to save time and labor
- b. Adequate storage space for type of operation and delivery schedule
- c. Clean, sanitary shelving and interior
- d. Arrangements for air circulation between items at all times

Note: Shelves should not be covered with paper.

- e. Properly maintained temperature

14. General practices and procedures for refrigerated storage

- a. Inspect deliveries before refrigerating.
- b. Before storing delivered items remove outer wrapping when possible as it may contain soil or harmful bacteria.
- c. Refrigerate delivered goods as soon as possible.

Information Sheet

- d. Do not overcrowd food items.
 - e. Store highly perishable foods and potentially hazardous foods in coldest areas of refrigerator.
- Note: The coldest area is usually the bottom third of the refrigerator.
- f. Check refrigerator temperature frequently.
 - g. Cover processed foods and leftovers to prevent drying, odor transfer, and contamination.
 - h. Wipe up spilled food immediately.
 - i. Be wary about putting warm foods in the refrigerator.

Note: Warm foods raise the inside temperature and may cause other foods to spoil.

- j. Store foods with strong odors in sealed containers.

15. Storage requirements for basic baking ingredients

- a. Flours, cereals, sugars, and spices may generally be stored at room temperature in tightly closed containers.
- Note: Whole grain flours keep best in a cool place.
- b. Dry yeast may be stored for several months in a dry, cool place.
 - c. Compressed yeast must be stored under refrigeration within the limits of its shelf life.
 - d. Fluid milk, buttermilk, and cream are stored in closed containers under refrigeration.
 - e. Canned milk and nonfat dry milk in unopened containers may be held at room temperature for several months.
 - f. Canned milk must be refrigerated after it has been opened.
 - g. Shell eggs should be stored under refrigeration.
 - h. Egg yolks, whites, and dried eggs must be stored in tightly covered containers under refrigeration.

Note: Cover yolks with a little water to prevent drying.

Information Sheet

- i. Butter and margarine require refrigerated storage.
- j. Most vegetable shortenings and oils can be held at room temperature.
- k. Animal fats, such as lard, that have not been stabilized require refrigeration and tight covers.

Note: Check the label for specific storage requirements.

**Basic Baking Ingredients
Unit 2**

**Assignment Sheet 1—Arrange Food Products Using the FIFO
Rotation System**

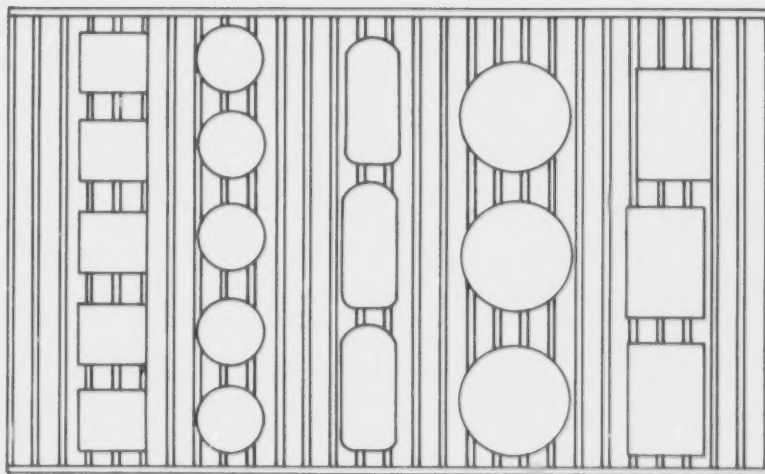
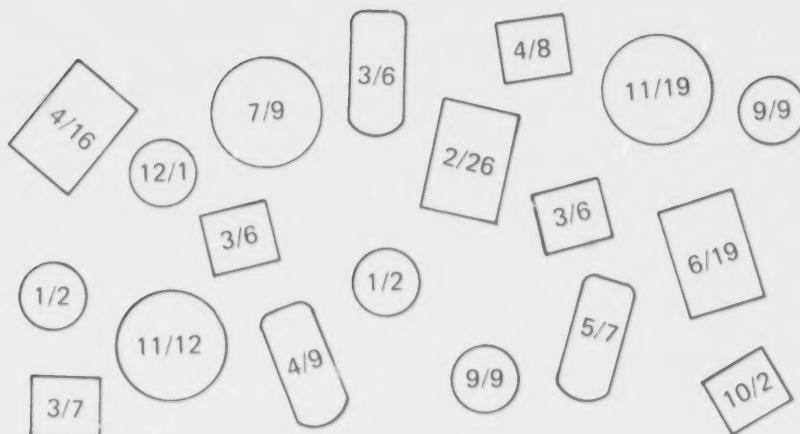
Name _____ Overall Rating _____

Evaluation criteria	Rating
Accuracy of item dates	_____
Items stored in FIFO order	_____

The shapes illustrated on the back of the page represent an assortment of cans and boxes that were stored in FIFO order on a storeroom shelf. On December 31, the shelf broke and everything on it fell to the floor. Arrange the items on a new shelf in FIFO order. Each container is marked with the date on which it was received; the first number is the month and the second number is the day of the month. Write the date from each container in the place where you would store it on the shelf. The above criteria will be used to evaluate your performance.

Note: The front of the shelf is at the bottom of the drawing.

Assignment Sheet 1



Basic Baking Ingredients Unit 2

Assignment Sheet 2—Complete a Food Requisition Form

Name _____ Overall Rating _____

Evaluation criteria	Rating
Station name and correct date are listed	_____
Correct quantity listed for food item	_____
All items needed from storeroom are listed	_____
Requisition is signed	_____

You are the baker, and the name of your work station is BAKERY. You are going to use the recipe below to prepare Brownies on March 17. When you check the recipe ingredients, you find that you have the salt, sugar, and baking powder at your work station, but everything else must come from the storeroom. Fill out the storeroom requisition on the next page for the items you will need. You may leave the "Cost" column blank; it is sometimes filled in later as a help in comparing costs. The above criteria will be used to evaluate your performance.

Brownies		
Yield: 48 portions		Portion: 2" x 2½" each
Ingredients	Quantity	Method
Eggs	12	1. Beat eggs at high speed.
Sugar	2 lb.	2. Add sugar, shortening, and vanilla.
Shortening, melted	1 lb.	3. Mix at medium speed for 5 minutes.
Vanilla	¼ c.	4. Add combined dry ingredients.
Cake flour	12 oz.	5. Mix at low speed for about 5 minutes.
Cocoa	8 oz.	6. Add nuts. Mix to blend.
Baking powder	4 t.	7. Place ½-inch deep in greased sheet cake pans.
Salt	2 t.	8. Bake at 350°F for 40 minutes.
Nuts, chopped	12 oz.	

Use and Care of Hand Tools and Utensils Unit 3

Objective Sheet

Unit Objective

After completing this unit, the student should be able to identify and use hand tools, utensils, and measuring and weighing equipment common to a baking operation. The student should demonstrate these competencies by completing the assignment and job sheets and scoring a minimum of 85 percent on the written test.

Specific Objectives

After completing this unit, the student should be able to:

1. Identify knives commonly used in baking operations.
2. Match knives with their uses.
3. Select from a list true statements about the care of knives.
4. Select from a list true statements concerning knife safety practices.
5. Identify baking tools and utensils.
6. Match baking tools and utensils with their uses.
7. Identify cooking tools and utensils.
8. Match cooking tools and utensils with their uses.
9. Identify food preparation tools and utensils.
10. Match food preparation tools and utensils with their uses.
11. Identify food handling tools and utensils.
12. Match food handling tools and utensils with their uses.
13. Identify measuring and weighing tools and utensils.
14. Match measuring and weighing tools and utensils with their uses.
15. Select from a list guidelines for the use and care of hand tools and utensils.

Objective Sheet

16. Check and compare accuracy of measuring methods. (Assignment Sheet 1)
17. Weigh a dry ingredient accurately using a baker's scale. (Job Sheet 1)
18. Weigh a liquid ingredient accurately using a portion scale. (Job Sheet 2)
19. Measure small amounts of dry and liquid ingredients accurately. (Job Sheet 3)
20. Measure a liquid ingredient accurately. (Job Sheet 4)

Use and Care of Hand Tools and Utensils

Unit 3

Suggested Activities

Instructional Plan

1. Read the unit carefully and plan for instruction. Study the specific objectives to determine the order in which you will present them.
2. Review the teaching suggestions below, and plan classroom activities. Integrate workplace skills as they apply to your vocational program.
3. Plan your presentation to take advantage of student learning styles and to accommodate special needs students.
4. Obtain materials to supplement instruction of this unit. See ordering information in the "Suggested Supplemental Resources" section.
5. Review instructions for evaluating student outcomes/performance and make copies of unit evaluation form.
6. Provide students with unit of instruction.
7. Discuss unit and specific objectives.
8. Discuss assignment and job sheets, and schedule due dates. Review criteria for evaluation of assignment and job sheets.
9. Discuss the use of the unit evaluation form with the students, and select and discuss the rating scale that will be used for student evaluation.
10. Give written test.
11. Compile assignment and job sheet ratings and written test scores on the Unit Evaluation Form.
12. Reteach and retest as required.

Suggested Activities

Teaching Suggestions

Note: Skill areas appearing in boldface type in the Teaching Suggestions refer to the academic and workplace skills identified by the American Society for Training and Development (ASTD) and the U.S. Department of Labor. These have been adapted by MAVCC.

1. Discuss the cost of hand tools and utensils. Skill areas: **listening, math.**
2. Have students write the uses of hand tools and utensils under their pictures in the information sheet. Skill area: **writing.**
3. Review information concerning sharpening knives and equipment in Unit 3 of MAVCC's *Food Production, Management, and Service: Production*. Skill areas: **reading, learning to learn.**
4. Discuss different methods of portion control by using hand tools and utensils. Refer to capacity charts for dishes and ladles. Skill areas: **listening, learning to learn, math.**
5. Demonstrate different tool handling techniques in reference to safety and convenience. Skill area: **listening**
6. Stress sanitation factors and inspection of utensils and hand tools before use. Skill areas: **listening, science**
7. Schedule the written test. Because it is long, you may want to give the test in parts over a period of time to allow students to understand the material better.

Resources Used in Developing This Unit

1. Grimes, V. and J. Chesser. *Food Service: Production and Service*. Stillwater, OK: Mid-America Vocational Curriculum Consortium.
2. Czack, Richard. *The Professional Chef's Knife*. Boston: CBI Publishing Company, Inc.

Suggested Supplemental Resources

1. *Baking Handbook for the School Food Service Program*. Minneapolis, MN: Food Service Division, General Mills, Inc.
2. Folsom, LeRoi. *The Professional Chef*, 4th ed. New York: Van Nos Reinhold, 1983.
3. Shugart, Grace and Mary Molt. *Food for Fifty*, 8th ed. New York: Macmillan, 1989.

Suggested Activities

Instructions For Evaluating Student Performance

When the student is ready to perform a specific task, obtain a copy of the job sheet which may be found in either the teacher or student edition. Then observe the student performing the procedure.

Process evaluation—Place a mark in the box to the left of each designated checkpoint if the student has satisfactorily achieved the step(s) for each checkpoint area. If the student is unable to correctly complete the procedure, have the student review the materials and try again.

Product evaluation—Once the student has satisfactorily completed the procedure, rate the student product (outcome) using the criteria which have been provided as part of the job sheet. If the student's product is unacceptable, have the student review the materials and submit another product for evaluation.

Sample performance evaluation keys have been provided below. Many other keys are available. Select one rating (grading scale) which best fits your program needs.

Option A

- 4 - Skilled—Can perform job with no additional training.
- 3 - Moderately skilled—Has performed job during training program; limited additional training may be required.
- 2 - Limited skill—Has performed job during training program; additional training is required to develop skill.
- 1 - Unskilled—Is familiar with process, but is unable to perform job.

Option B

- Yes—Can perform job with no additional training.
- No—Is unable to perform job satisfactorily.

Use and Care of Hand Tools and Utensils
Unit 3

Answers to Written Test

1. a. Paring knife
 b. French knife
 c. Bread knife
 d. Utility knife

2. a. 3
 b. 2
 c. 4
 d. 1

3. b, e, f

4. b, c, f, h

5. a. Flour sifter
 b. Pastry bag
 c. Baking pan
 d. Muffin tin
 e. Dough cutter
 f. Pie or cake marker
 g. Baker's scales
 h. Tube cake pan
 i. Pastry brush
 j. Peel
 k. Sheet pan
 l. Pie pan
 m. Pie or cake knife
 n. Pastry wheel
 o. Pastry tips
 p. Rolling pin

6. a. 8 e. 4 i. 12 m. 7
 b. 1 f. 5 j. 3 n. 16
 c. 2 g. 9 k. 15 o. 6
 d. 13 h. 14 l. 11 p. 10

7. a. Double boiler
 b. Stock pot
 c. Sauté pan
 d. Brazier pan
 e. Steam table pan
 f. Sauce pan
 g. Bain-marie pans
 h. Sauce pot

Answers to Written Test

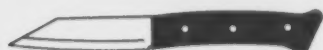
8. a. 1 e. 5
b. 6 f. 8
c. 4 g. 3
d. 2 h. 7
9. a. Box grater
b. China cap
c. French wire whip
d. Piano wire whip
e. Melon baller
f. Colander
g. Strainer
h. Vegetable peeler
10. a. 3 e. 1
b. 2 f. 5
c. 6 g. 4
d. 7 h. 8
11. a. Rubber scraper
b. Skimmer
c. Food tongs
d. Offset spatula
e. Disher
f. Flat spatula
g. Solid ladle
h. Solid kitchen spoon
i. Plastic scraper
j. Perforated ladle
12. a. 2 f. 10
b. 3 g. 9
c. 8 h. 1
d. 6 i. 4
e. 7 j. 5
13. a. Large-volume dry measure
b. Graduated liquid measure
c. Portion scale
d. Measuring spoon set
e. Graduated dry measuring cup set
f. Large-volume liquid measure
14. a. 3 d. 1
b. 2 e. 6
c. 5 f. 4
15. a, b, e

Use and Care of Hand Tools and Utensils Unit 3

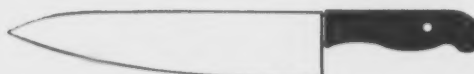
Written Test

Name _____ Score _____

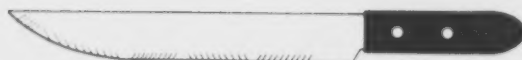
1. Identify knives used in a baking operation. Write the correct names in the blanks.



a. _____



b. _____



c. _____



d. _____

2. Match knives with their uses. Write the correct numbers in the blanks.

- | | |
|--|------------------|
| _____ a. Peeling, cutting, or slicing fruits | 1. Bread knife |
| _____ b. Slicing, cutting, and shredding raw fruits; chopping small quantities of food; dicing and mincing ingredients | 2. French knife |
| _____ c. Paring and sectioning fruits | 3. Paring knife |
| _____ d. Slicing bread or cake | 4. Utility knife |

3. Select from a list true statements about the care of knives. Write an "X" in the blank before each correct statement.

- _____ a. Soak knives in hot soapy water before washing.
- _____ b. Place knives one at a time in the sink; wash each individually.
- _____ c. Store each knife separately.
- _____ d. Store knives with other utensils but make sure that points all face the same direction.
- _____ e. Use knives only for the jobs for which they are intended.
- _____ f. Use a cutting board; never cut on a metal surface.

Written Test

4. Select true statements concerning knife safety practices. Write an "X" in the blank before each correct safety practice.

- _____ a. A dull knife is safe to use.
- _____ b. If you drop a knife, do not attempt to catch it.
- _____ c. Cut away from your body and hands.
- _____ d. Hold items in hand while cutting.
- _____ e. Hand a knife to someone else by grasping the handle.
- _____ f. Keep your eyes and your mind on your work.
- _____ g. Carry a knife in front of you, point to the side.
- _____ h. Keep knife handle free of grease or other slippery materials

5. Identify baking tools and utensils. Write the correct names in the blanks.



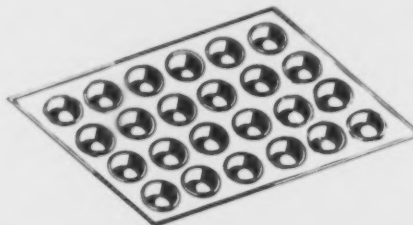
a. _____



b. _____

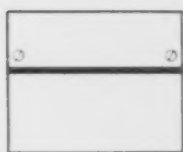


c. _____

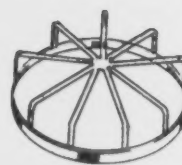


d. _____

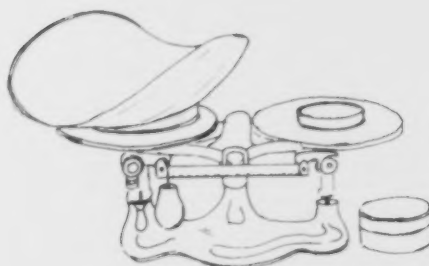
Written Test



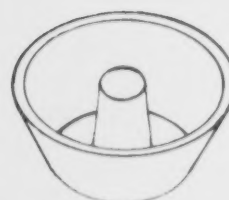
e. _____



f. _____



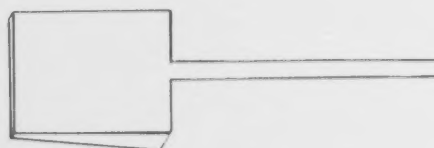
g. _____



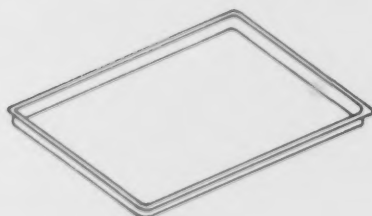
h. _____



i. _____



j. _____



k. _____



l. _____

Written Test



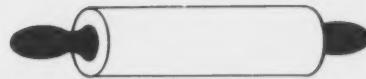
m. _____



n. _____



o. _____



p. _____

6. Match baking tools and materials with their uses. Write the correct numbers in the blanks.

- _____ a. Accurately weighing ingredients
- _____ b. Sifting dry ingredients
- _____ c. Baking foods
- _____ d. Cutting dough
- _____ e. Baking muffins
- _____ f. Cutting all types of flat doughs
- _____ g. Holding icing during decorating
- _____ h. Making designs with pastry bag
- _____ i. Brushing on liquids

- 1. Flour sifter
- 2. Baking pan
- 3. Peel
- 4. Muffin tin
- 5. Pastry wheel
- 6. Pie pan
- 7. Rolling pin
- 8. Baker's scales
- 9. Pastry bag

Written Test

- | | | |
|---------|---|------------------------|
| _____j. | Placing and removing products such as pizza, bread, and pies in ovens | 10. Sheet pan |
| _____k. | Marking pie or cake for portion control | 11. Tube cake pan |
| _____l. | Baking tube cakes | 12. Pastry brush |
| _____m. | Rolling dough to desired thickness | 13. Dough cutter |
| _____n. | Cutting and serving pie or cake | 14. Pastry tips |
| _____o. | Baking pie crust or pies | 15. Pie or cake marker |
| _____p. | Baking foods such as sheet cakes and large volumes of cookie and pastries | 16. Pie or cake knife |

7. Identify cooking tools and utensils. Write the correct names in the blanks.



a. _____



b. _____



c. _____



d. _____

Written Test



e. _____



f. _____



g. _____



h. _____

8. Match cooking tools and utensils with their uses. Write the correct numbers in the blanks.

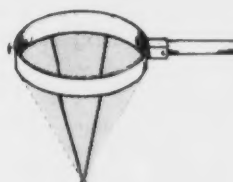
- | | | |
|----------|--|--------------------|
| _____ a. | Cooking small amounts of food quickly in a minimum amount of fat | 1. Sauté pan |
| _____ b. | Cooking food on top of the range | 2. Bain-marie pans |
| _____ c. | Cooking small amounts of food on top of the range | 3. Stock pot |
| _____ d. | Storing food items | 4. Sauce pan |
| _____ e. | Cooking foods that scorch easily | 5. Double boiler |
| _____ f. | Cooking and holding food for serving | 6. Sauce pot |
| _____ g. | Cooking large quantities of food on top of the range | 7. Brazier pan |
| _____ h. | Stewing foods | 8. Steam table pan |

Written Test

9. Identify food preparation tools and utensils. Write the correct names in the blanks.



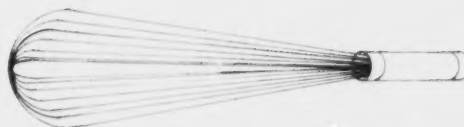
a. _____



b. _____



c. _____



d. _____



e. _____



f. _____



g. _____



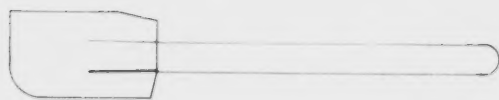
h. _____

Written Test

10. Match food preparation tools and utensils with their uses. Write the correct numbers in the blanks.

- | | |
|---|---------------------|
| _____ a. Grating or shredding small amounts of food | 1. Strainer |
| _____ b. Straining particles from liquids | 2. China cap |
| _____ c. Straining liquids from food | 3. Box grater |
| _____ d. Combining dry ingredients with liquid | 4. Melon baller |
| _____ e. Straining foods | 5. Vegetable peeler |
| _____ f. Peeling fruits and vegetables | 6. Colander |
| _____ g. Cutting fruits and vegetables into balls | 7. French wire whip |
| _____ h. Incorporating air into liquids and thin mixtures | 8. Piano wire whip |

11. Identify food handling tools and utensils. Write the correct names in the blanks.



a. _____



b. _____

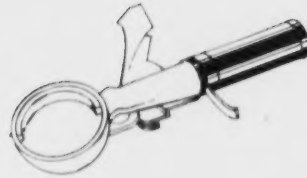


c. _____



d. _____

Written Test



e. _____



f. _____



g. _____



h. _____



i. _____



j. _____

12. Match food handling tools and utensils with their uses. Write the correct numbers in the blanks.

- _____ a. Scraping down bowls
- _____ b. Portioning and serving foods
- _____ c. Removing food from cans, jars, and bowls
- _____ d. Stirring, mixing, or serving soups and sauces

- 1. Food tongs
- 2. Plastic scraper
- 3. Disher
- 4. Offset spatula

Written Test

- | | | |
|----------|--|------------------------|
| _____ e. | Icing cakes | 5. Skimmer |
| _____ f. | Straining solids from liquids | 6. Solid ladle |
| _____ g. | Folding, stirring, or serving food | 7. Flat spatula |
| _____ h. | Handling food | 8. Rubber scraper |
| _____ i. | Mixing, spreading, or scraping food | 9. Solid kitchen spoon |
| _____ j. | Removing food particles that rise to the top of stock and sauces | 10. Perforated ladle |

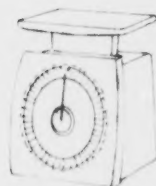
13. Identify measuring and weighing tools and utensils. Write the correct names in the blanks.



a. _____



b. _____



c. _____



d. _____



e. _____



f. _____

Written Test

14. Match measuring and weighing tools and utensils with their uses. Write the correct numbers in the blanks.

- | | | |
|----------|--|------------------------------------|
| _____ a. | Measuring large quantities of dry ingredients from pint to gallon size | 1. Measuring spoon |
| _____ b. | Weighing food, such as ingredients in recipes, or for portion control | 2. Portion scale |
| _____ c. | Measuring dry foods or shortenings in 1 cup amounts or less | 3. Large-volume dry measure |
| _____ d. | Measuring small amounts of liquid and dry ingredients | 4. Graduated liquid measure |
| _____ e. | Measuring large quantities of liquid from pint to gallon size | 5. Graduated dry measuring cup set |
| _____ f. | Measuring liquids in fluid ounces and fractional amounts | 6. Large-volume liquid measure |

15. Select from a list guidelines for the use and care of hand tools and utensils. Write an "X" in the blank before each correct guideline.

- _____ a. Use only those items needed for the job being done.
- _____ b. Use only as intended.
- _____ c. Use containers twice the size of the amount to be prepared.
- _____ d. Keep hand tools and utensils in storage until just before needed.
- _____ e. Store in proper storage area.
- _____ f. Clean at the end of each day.
- _____ g. Discard any broken or unusable tools.

*Permission to duplicate this test is granted.

**Use and Care of Hand Tools and Utensils
Unit 3**

Unit Evaluation Form

Student Name _____ Unit Rating _____

Assignment Sheet 1—Check and Compare Accuracy of
Measuring Methods Rating _____

Comments: _____

Job Sheet 1—Weigh a Dry Ingredient Accurately Using a Baker's Scale Rating _____

Comments: _____

Job Sheet 2—Weigh a Liquid Ingredient Accurately Using a
Portion Scale Rating _____

Comments: _____

Job Sheet 3—Measure Small Amounts of Dry and Liquid Ingredients
Accurately Rating _____

Comments: _____

Job Sheet 4—Measure a Liquid Ingredient Accurately Rating _____

Comments: _____

Written Test Scores

Pretest _____ Posttest _____ Other _____

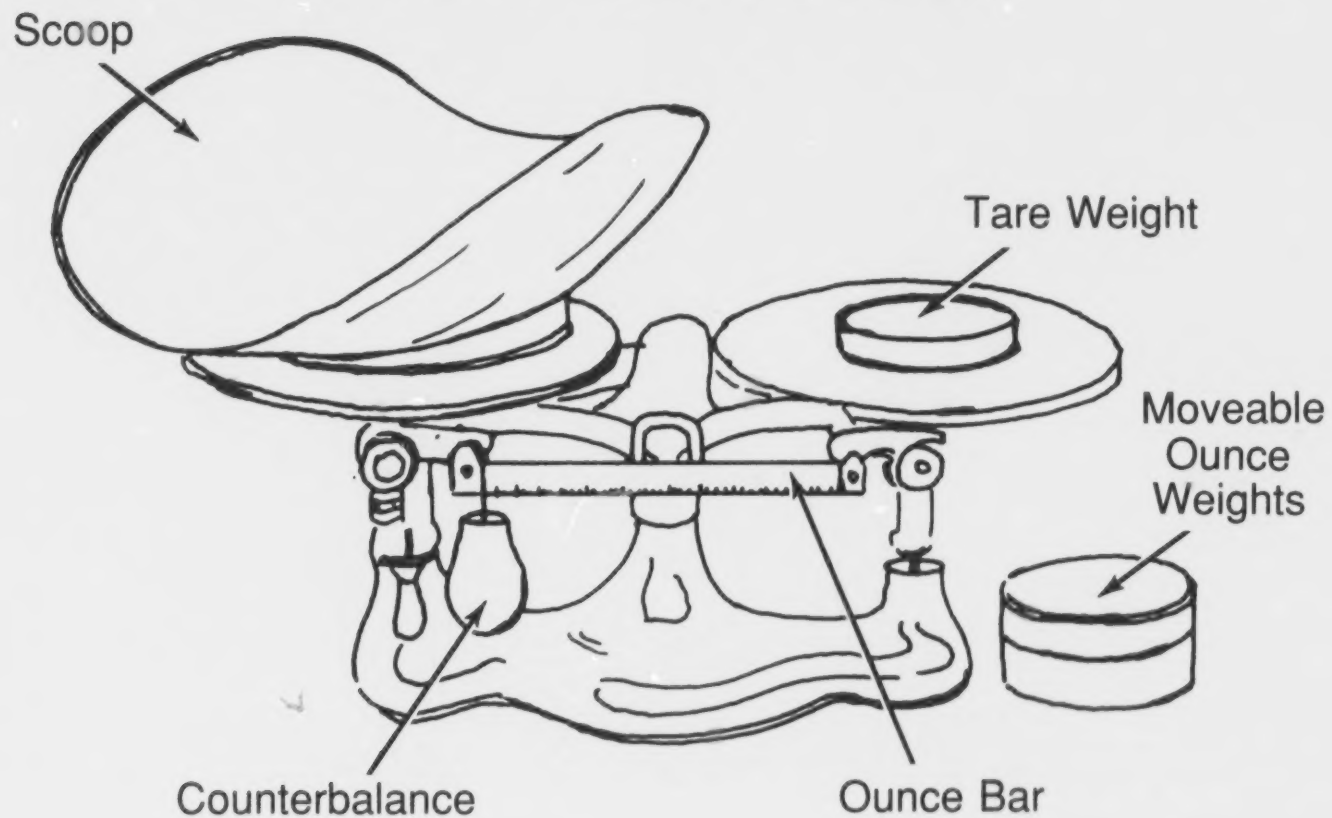
Other _____

Teacher Signature _____ Date _____

Student Signature _____ Date _____

*Permission to duplicate this form is granted.

Parts of a Baker's Scale



Use and Care of Hand Tools and Utensils Unit 3

Information Sheet

1. Knives used in a baking operation (Figures 1-4)

- a. Bread knife

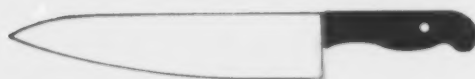
Figure 1



- b. French knife

Note: This is also called a chef knife and is the most common knife used.

Figure 2



- c. Paring knife

Figure 3



- d. Utility knife

Figure 4



Information Sheet

2. Uses of knives

- a. **Bread knife** — Slicing bread or cake
- b. **French knife**
 - Slicing, cutting, and shredding raw fruits
 - Chopping small quantities of food
 - Dicing and mincing ingredients
- c. **Paring knife** — Peeling, cutting, or slicing fruits
- d. **Utility knife** — Paring and sectioning fruits

3. Care of knives

Caution: Always use extreme care when handling knives.

- a. Wash knives by themselves, not with other utensils.

Caution: Never place knives in water and leave unattended.

- b. Place knives one at a time in the sink; wash each individually.
- c. Dry each knife separately.
- d. Store in a knife rack or a special holder in a drawer in the department in which it is used.

Note: Do not store knives loose in a drawer as this may dull the cutting edge and create a safety hazard.

- e. Use a knife only for the job for which it is intended.
Example: Knives are not designed for prying open lids.
- f. Use a cutting board; never cut on a metal surface.

Information Sheet

4. Knife safety practices

Note: Never leave knives unattended in work area.

- a. Keep knives sharp; a sharp knife is safer than a dull knife.
- b. Keep knife handle free of grease or other slippery materials
- c. If you drop a knife, do not attempt to catch it.
- d. Cut away from your body and hands.
- e. Place items to be cut on a cutting board; do not hold in your hand.
- f. Place knife on table and allow others to pick it up instead of handing it to them.
- g. Keep your eyes and your mind on your work.
- h. Carry a knife at your side, point down.

5. Baking tools and utensils (Figures 5-20)

- a. Baking pan

Figure 5

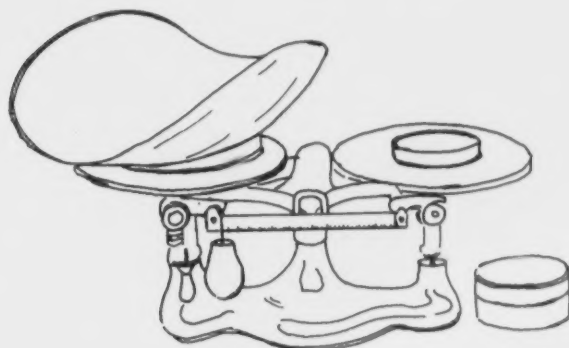


Information Sheet

- b. Baker's scales (Transparency 1)

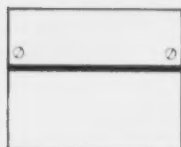
Note: Baker's scales are also called *balance scales*. They may be used in all food production areas that require ingredients to be weighed.

Figure 6



- c. Dough cutter

Figure 7



- d. Flour sifter

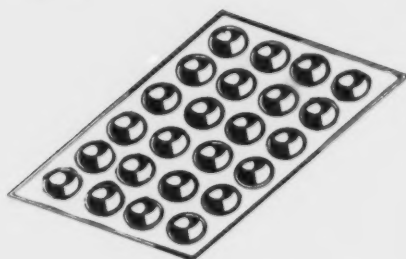
Figure 8



Information Sheet

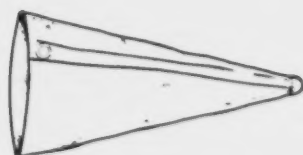
- e. Muffin tin

Figure 9



- f. Pastry bag

Figure 10



- g. Pastry brush

Figure 11



- h. Pastry tips

Figure 12



Information Sheet

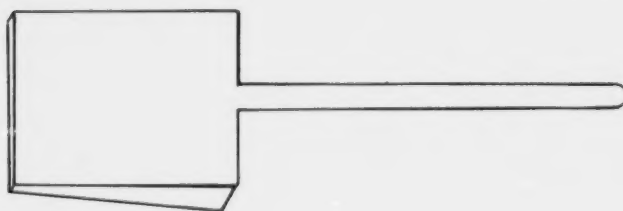
- i. Pastry wheel

Figure 13



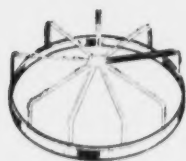
- j. Peel

Figure 14



- k. Pie or cake marker

Figure 15



- l. Pie or cake knife

Figure 16



Information Sheet

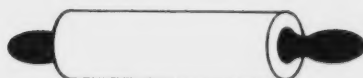
- m. Pie pan

Figure 17



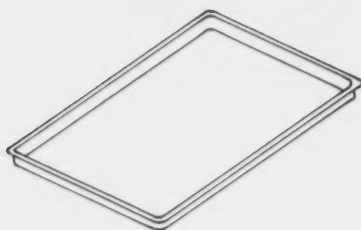
- n. Rolling pin

Figure 18



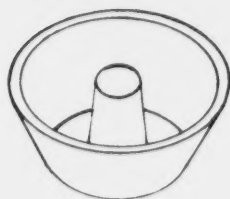
- o. Sheet pan

Figure 19



- p. Tube cake pan

Figure 20



Information Sheet

6. Uses of baking tools and utensils

- a. **Baking pan** — Baking foods
- b. **Baker's scales** — Accurately weighing ingredients
 - Scoop—Holding dry ingredients
 - Counterbalance—Balancing the scoop
 - Ounce weight—Weighing fractional ounces to 1 pound (16 ounces)
 - Additional weights—Weighing amounts over 1 pound
- c. **Dough cutter** — Cutting dough

Note: The dough cutter is also used for scraping table tops.
- d. **Flour sifter** — Sifting dry ingredients
- e. **Muffin tin** — Baking muffins
- f. **Pastry bag** — Holding icing during decorating
- g. **Pastry brush** — Brushing on liquids
- h. **Pastry tips** — Making designs with pastry bag
- i. **Pastry wheel** — Cutting all types of flat doughs
- j. **Peel** — Placing products into and removing products from ovens

Examples: Pizza, bread, pies
- k. **Pie or cake marker** — Marking pies or cakes for portion control
- l. **Pie or cake knife** — Cutting and serving pies or cakes
- m. **Pie pan** — Baking pie crust or pies
- n. **Rolling pin** — Rolling doughs to desired thicknesses
- o. **Sheet pan** — Baking foods such as sheet cakes and large volumes of cookies and pastries

Note: The sheet pan is also referred to as a *bun pan*.
- p. **Tube cake pan** — Baking tube cakes

Examples: Angel food, chiffon, bundt cakes

Information Sheet**7. Cooking tools and utensils (Figures 21-28)**

- a. Bain-marie pans

Figure 21



- b. Brazier pan

Note: A brazier is a heavy-duty stewing pan with a tightly fitting cover.

Figure 22



Information Sheet

- c. Double boiler

Figure 23



- d. Sauce pan

Figure 24



- e. Sauce pot

Figure 25



Information Sheet

- f. Sauté pan

Figure 26



- g. Steam table pan

Figure 27



- h. Stock pot

Note: A stock pot has a larger capacity but is not as heavy as a sauce pot.

Figure 28



Information Sheet

8. Uses of cooking tools and utensils

- a. **Bain-marie pans** — Storing food items
- b. **Brazier pan** — Stewing foods
- c. **Double boiler** — Cooking foods that scorch easily
- d. **Sauce pan** — Cooking small amounts of food on top of the range
- e. **Sauce pot** — Cooking food on top of the range
- f. **Sauté pan** — Cooking small amounts of food quickly in a minimum amount of fat
- g. **Steam table pan** — Cooking and holding food for serving
- h. **Stock pot** — Cooking large quantities of food on top of the range

9. Food preparation tools and utensils (Figures 29-36)

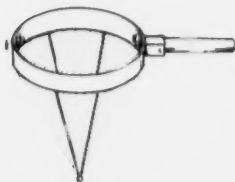
- a. Box grater

Figure 29



- b. China cap

Figure 30



Information Sheet

- c. Colander

Figure 31



- d. French wire whip

Note: This type of whip is made from rigid wire.

Figure 32



- e. Melon baller

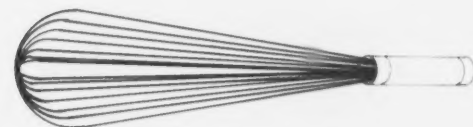
Figure 33



- f. Piano wire whip

Note: This type of whip is made from flexible wire.

Figure 34



Information Sheet

- g. Strainer

Figure 35



- h. Vegetable peeler

Figure 36



10. Uses of food preparation tools and utensils

- a. **Box grater** — Grating or shredding small amounts of food
- b. **China cap** — Straining particles from liquids
- c. **Colander** — Straining liquids from food
- d. **French wire whip** — Combining dry ingredients with liquid
- e. **Melon baller** — Cutting fruits and vegetables into balls
- f. **Piano wire whip** — Incorporating air into liquids and thin mixtures
- g. **Strainer** — Straining foods
- h. **Vegetable peeler** — Peeling fruits and vegetables

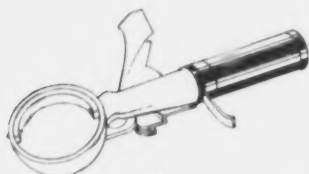
Note: Vegetable peelers are also used to make thin slices or curls.

Information Sheet

11. Food handling tools and utensils (Figures 37-46)

- a. Disher

Figure 37



- b. Flat spatula

Figure 38



- c. Food tongs

Figure 39



- d. Offset spatula

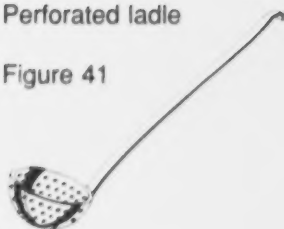
Figure 40



Information Sheet

- e. Perforated ladle

Figure 41



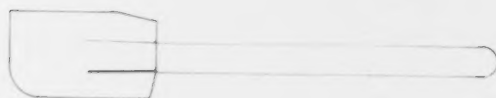
- f. Plastic scraper

Figure 42



- g. Rubber scraper

Figure 43



- h. Skimmer

Figure 44



- i. Solid kitchen spoon

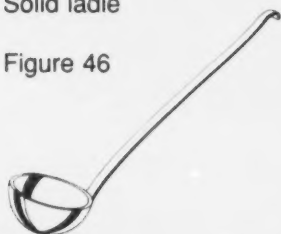
Figure 45



Information Sheet

- j. Solid ladle

Figure 46



12. Uses of food handling tools and utensils

- a. **Disher** — Portioning and serving foods

Note: For portion control, the number on the disher indicates servings per quart.

Example:

Disher Measurements	
Number*	Measure
8	$\frac{1}{2}$ c.
10	6 Tbsp.
12	$\frac{1}{3}$ c.
16	$\frac{1}{4}$ c.
20	$3\frac{1}{5}$ Tbsp.
24	$2\frac{2}{3}$ Tbsp.
30	$2\frac{1}{5}$ Tbsp.
40	$1\frac{3}{5}$ Tbsp.
*Portions per quart	

- b. **Flat spatula** — Icing cakes
- c. **Food tongs** — Handling food
- d. **Offset spatula** — Mixing, spreading, or scraping food
- e. **Perforated ladle** — Straining solids from liquids
- f. **Plastic scraper** — Scraping down bowls
- g. **Rubber scraper** — Removing food from cans, jars, and bowls

Information Sheet

- h. **Skimmer** — Removing food particles that rise to the top of stock and sauces

Note: The skimmer is also often used to remove food particles from the deep fat fryer.

- i. **Solid kitchen spoon** — Folding, stirring, or serving food

- j. **Solid ladle** — Stirring, mixing, or serving soups and sauces

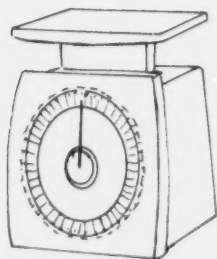
Example:

Ladle Measurements	
Number (size)*	Measure
1 ounce	$\frac{1}{8}$ c.
2 ounces	$\frac{1}{4}$ c.
4 ounces	$\frac{1}{2}$ c.
6 ounces	$\frac{3}{4}$ c.
8 ounces	1 c.
*Amount of serving	

13. Measuring and weighing tools and utensils (Figures 47-52)

- a. Portion scale

Figure 47



Information Sheet

b. Graduated dry measuring cup set

Note: Graduated dry measuring cups are available in fractional amounts of $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{2}$, and 1 cup.

Figure 48



c. Graduated liquid measure

Note: Graduated liquid measures are available in cup, pint, and quart sizes.

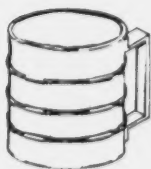
Figure 49



d. Large-volume dry measure

Note: Large-volume dry measures are available in pint, quart, half-gallon, and gallon sizes.

Figure 50



Information Sheet

- e. Large-volume liquid measure

Note: Large-volume liquid measures are available in pint, quart, half-gallon, and gallon sizes.

Figure 51



- f. Measuring spoon set

Note: Measuring spoons usually come in sets that include tablespoon, teaspoon, $\frac{1}{2}$ teaspoon, and $\frac{1}{4}$ teaspoon sizes.

Figure 52



14. Uses of measuring and weighing tools and utensils

- a. **Portion scale** — Weighing food, such as ingredients in recipes, or for portion control
- b. **Graduated dry measuring cup set** — Measuring dry foods or shortenings in 1 cup amounts or less
- c. **Graduated liquid measure** — Measuring liquids in fluid ounces and fractional amounts
- d. **Large-volume dry measure** — Measuring large quantities of dry ingredients from pint to gallon size

Information Sheet

- e. **Measuring spoon set** — Measuring small amounts of liquid and dry ingredients
- f. **Large-volume liquid measure** — Measuring large quantities of liquid from pint to gallon size

Note: These measures are usually not accurate for less than the full amount because of their inability to show content levels.

15. Rules to observe in the use and care of hand tools and utensils

- a. Use only those items needed for the job being done.
- b. Use only as intended.
- c. Use proper size container for amount to be prepared.
- d. Plan work in order to have appropriate hand tools and utensils available when needed.
- e. Store in proper storage area.
- f. Clean after each use.
- g. Report any broken or unusable tools to your supervisor.

Use and Care of Hand Tools and Utensils Unit 3

Assignment Sheet 1—Check and Compare Accuracy of Measuring Methods

Name _____ Overall Rating _____

Evaluation criteria	Rating
Accurately measured given amounts	_____
Observed weight differences with different container filling procedures	_____

This assignment is used to emphasize the wide variations that occur due to improper measuring procedures. Weigh and compare the following.

1. Weigh 1 cup of flour dipped from the bin or sack and leveled with a spatula.
2. Weigh 1 cup of sifted flour placed gently in the cup by spoonfuls and leveled.
 - a. Weight of dipped flour _____
 - b. Weight of sifted flour _____
 - c. Which weighs the most? _____
 - d. Which method of measuring is more accurate? _____
3. Weigh 1 cup of brown sugar poured loosely into a cup without packing it.
4. Weigh 1 cup of brown sugar firmly packed so that it holds its shape when turned out of a cup.
 - a. Weight of loosely poured sugar _____
 - b. Weight of firmly packed sugar _____
 - c. Which weighs the most? _____
 - d. Which methods of measuring is more accurate? _____

Use and Care of Hand Tools and Utensils Unit 3

Job Sheet 1—Weigh a Dry Ingredient Accurately Using a Baker's Scale

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Scale balanced	_____
8 ounces of dry ingredient accurately measured	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance, using the above criteria.

A. Tools and materials

Baker's scale
Dry ingredient such as flour or sugar
Ingredient scoop

B. Procedure

- ☐ 1. Place the scoop on the left side of the scale.
- ☐ 2. Place the counterbalance on the right side of the scale.
- ☐ 3. Balance the scale by placing the ounce weight on zero.
- ☐ 4. Place one 2-pound weight or two 1-pound weights on the same side as the tare.
- ☐ 5. Move the ounce weight to 8 ounces.

Note: The scale should no longer balance because there is more weight on the right than on the left.

- ☐ 6. Pour the dry ingredient into the scoop.
- ☐ 7. Observe both sides of the scale: The left side of the balance will be lowered while the right side will be raised until the two are even, or balance. If too much is poured into the scoop, the left side will be lower than the right.

Job Sheet 1

- ☐ 8. Remove or add extra ingredient until the two sides of the scale are equal.

Evaluator's comments: _____

Use and Care of Hand Tools and Utensils Unit 3

Job Sheet 2—Weigh a Liquid Ingredient Accurately Using a Portion Scale

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Scale dial accurately adjusted	_____
12 ounces of liquid ingredient accurately measured	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance, using the above criteria.

A. Tools and materials

Portion scale

Water

Mixing bowl

B. Procedure

Note: The following steps are specifically written to weigh 12 ounces of liquid.

- ☐ 1. Place the mixing bowl on the scale platform.
- ☐ 2. Adjust scale dial to realign "0" with pointer.
- ☐ 3. Add liquid to the mixing bowl until the pointer reaches the 12-ounce mark.

Evaluator's comments: _____

Use and Care of Hand Tools and Utensils

Unit 3

Job Sheet 3—Measure Small Amounts of Dry and Liquid Ingredients Accurately

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Dry ingredient accurately measured	_____
Liquid ingredient accurately measured	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance, using the above criteria.

A. Tools and materials

Set of measuring spoons
 Spatula
 Dry ingredient such as baking powder or soda
 Waxed paper
 Liquid ingredient such as water

B. Procedure for measuring dry ingredients.

- ☐ 1. Put appropriate measuring spoon in the dry ingredient container, and stir well.

Note: Spoon must be dry.

- ☐ 2. Heap the measuring spoon with the dry ingredient.
- ☐ 3. Hold the spoon over the container or over waxed paper, and level off with spatula.
- ☐ 4. Return the excess amount leveled off to the original container.

Job Sheet 3

C. Procedure for measuring liquid ingredients.

- ☐ 1. Select appropriate measuring spoon.
- ☐ 2. Fill until spoon is full.

Note: You may need to level off thick liquids such as corn syrup.

Evaluator's comments: _____

Use and Care of Hand Tools and Utensils Unit 3

Job Sheet 4—Measure a Liquid Ingredient Accurately

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Cup at eye level	_____
Ingredient accurately measured	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance, using the above criteria.

A. Tools and materials

Transparent measuring cup
Container for water
Water

B. Procedure

Note: The following steps are specifically written to measure $\frac{3}{4}$ cup of liquid.

- ☐ 1. Place measuring cup on level surface at eye level.
- ☐ 2. Fill cup to $\frac{3}{4}$ line.
- ☐ 3. Check measurement.

Evaluator's comments: _____

Use and Care of Equipment Unit 4

Objective Sheet

Unit Objective

After completing this unit, the student should be able to identify and operate various types of ordinary baking and commercial baking equipment. The student should demonstrate these competencies by completing the job sheets and scoring a minimum of 85 percent on the written test.

Specific Objectives

After completing this unit, the student should be able to:

1. Identify types of baking equipment.
2. List equipment that must be sanitized just prior to use.
3. Identify types of commercial baking equipment.
4. Match commercial baking equipment with their characteristics.
5. Complete guidelines for operating equipment.
6. Select facts about safety requirements for equipment.
7. Operate a doughnut machine. (Job Sheet 1)
8. Clean a doughnut machine. (Job Sheet 2)
9. Operate a waste disposer. (Job Sheet 3)
10. Operate a mixer. (Job Sheet 4)
11. Clean a mixer. (Job Sheet 5)
12. Operate a vertical cutter mixer. (Job Sheet 6)
13. Clean a vertical cutter mixer. (Job Sheet 7)
14. Operate a deep fat fryer. (Job Sheet 8)
15. Clean a gas deep fat fryer. (Job Sheet 9)

Objective Sheet

16. Clean an electric deep fat fryer. (Job Sheet 10)
17. Operate a steam jacketed kettle. (Job Sheet 11)
18. Clean a steam jacketed kettle. (Job Sheet 12)
19. Operate a conventional oven. (Job Sheet 13)
20. Clean a conventional oven. (Job Sheet 14)
21. Operate a convection oven. (Job Sheet 15)
22. Clean a convection oven. (Job Sheet 16)
23. Operate a microwave oven. (Job Sheet 17)
24. Clean a microwave oven. (Job Sheet 18)
25. Operate a range. (Job Sheet 19)
26. Clean a range. (Job Sheet 20)
27. Use platform scales. (Job Sheet 21)
28. Clean a work table. (Job Sheet 22)
29. Clean a can opener. (Job Sheet 23)
30. Operate a blender (Job Sheet 24)
31. Clean a blender. (Job Sheet 25)

Use and Care of Equipment

Unit 4

Suggested Activities

Instructional Plan

1. Read the unit carefully and plan for instruction. Study the specific objectives to determine the order in which you will present them.
2. Review the teaching suggestions below, and plan classroom activities. Integrate workplace skills as they apply to your vocational program.
3. Plan your presentation to take advantage of student learning styles and to accommodate special needs students.
4. Obtain materials to supplement instruction of this unit. See ordering information in the "Suggested Supplemental Resources" section.
5. Review instructions for evaluating student outcomes/performance and make copies of the Unit Evaluation Form.
6. Provide students with unit of instruction.
7. Discuss unit and specific objectives.
8. Discuss and demonstrate the job sheets, and review the evaluation criteria for each. Schedule performance dates.
9. Discuss the use of the Unit Evaluation Form with the students, and select and discuss the rating scale that will be used for student evaluation.
10. Give written test.
11. Compile job sheet ratings and written test scores on the Unit Evaluation Form.
12. Reteach and retest as required.

Suggested Activities

Teaching Suggestions

Note: Skill areas appearing in boldface type in the Teaching Suggestions refer to the academic and workplace skills identified by the American Society for Training and Development (ASTD) and the U.S. Department of Labor. These have been adapted by MAVCC.

1. Consult manufacturer's directions on use and care of equipment for adaptability of job sheets.
2. Invite service representatives to class to show students how to operate and clean equipment not covered in this unit. Have students take notes, then practice using and cleaning these pieces of equipment. Skill areas: **writing, listening, learning to learn.**
3. Write job sheets on the operation and cleaning of equipment that you have but that are not covered in this unit.
4. Stress the importance of following all **safety** and **sanitation** procedures. Refer to Units 5 and 6 of MAVCC's *Food Production, Management, and Services: Introduction* for pertinent information. Have students discuss equipment or parts of equipment that require special care in handling. Skill areas: **science, listening, oral communication.**

Resources Used in Developing This Unit

1. *Baking Handbook for the School and Food Service Program.* Minneapolis, MN: General Mills, Inc.
2. Grimes, V. and J. Chesser. *Food Service: Production and Service.* Stillwater, OK: Mid-America Vocational Curriculum and Consortium.
3. Longree, Karla and Gertrude Blaker. *Sanitary Techniques for Food Service.* New York: John Wiley and Sons.
4. West, B., et. al. *Food Service in Institutions*, 5th ed. New York: John Wiley and Sons, Inc.

Suggested Supplemental Resource

Order slides on food service equipment from:

Curriculum and Instructional Materials Center
1500 West Seventh Avenue
Stillwater, OK 74074-4364

Suggested Activities

Instructions For Evaluating Student Performance

When the student is ready to perform a specific task, obtain a copy of the job sheet which may be found in either the teacher or student edition. Then observe the student performing the procedure.

Process evaluation—Place a mark in the box to the left of each designated checkpoint if the student has satisfactorily achieved the step(s) for each checkpoint area. If the student is unable to correctly complete the procedure, have the student review the materials and try again.

Product evaluation—Once the student has satisfactorily completed the procedure, rate the student product (outcome) using the criteria which have been provided as part of the job sheet. If the student's product is unacceptable, have the student review the materials and submit another product for evaluation.

Sample performance evaluation keys have been provided below. Many other keys are available. Select one rating (grading scale) which best fits your program needs.

Option A

- 4 - Skilled—Can perform job with no additional training.
- 3 - Moderately skilled—Has performed job during training program; limited additional training may be required.
- 2 - Limited skill—Has performed job during training program; additional training is required to develop skill.
- 1 - Unskilled—Is familiar with process, but is unable to perform job.

Option B

- Yes—Can perform job with no additional training.
- No—Is unable to perform job satisfactorily.

Use and Care of Equipment Unit 4

Answers to Written Test

1.
 - a. Mixer
 - b. Deep fat fryer
 - c. Waste disposer
 - d. Steam jacketed kettle
 - e. Doughnut machine
 - f. Vertical cutter mixer (VCM)
 - g. Range
 - h. Microwave oven
 - i. Can opener
 - j. Blender
 - k. Conventional oven
 - l. Convection oven
 - m. Platform scale
 - n. Work table
2. a, d, e, g, i, j, k
3.
 - a. Cookie depositor
 - b. Reel oven
 - c. Bun or roll divider
 - d. Proofing cabinet
 - e. Deck or stack oven
4.

a.	3	d.	5
b.	2	e.	4
c.	1		
5.
 - a. Safety features
 - b. Emergency stop
 - c. Clean
 - d. Rings
 - e. Loose clothing
 - f. Power source
 - g. Safety features
 - h. Gears/speed
 - i. Unneeded
 - j. Switches
 - k. Do not pull
 - l. Lubricating
 - m. Use
 - n. Misplaced
 - o. Running properly
6.

a.	1	d.	1
b.	3	e.	3
c.	2		

Use and Care of Equipment
Unit 4

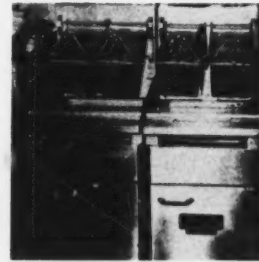
Written Test

Name _____ Score _____

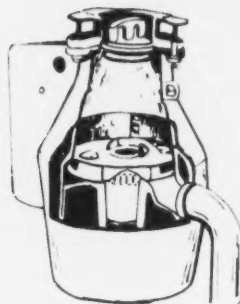
1. Identify the following types of baking equipment. Write the correct names in the blanks.



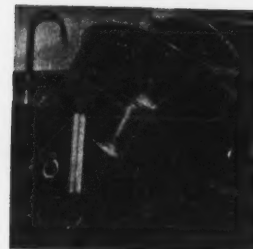
a. _____



b. _____

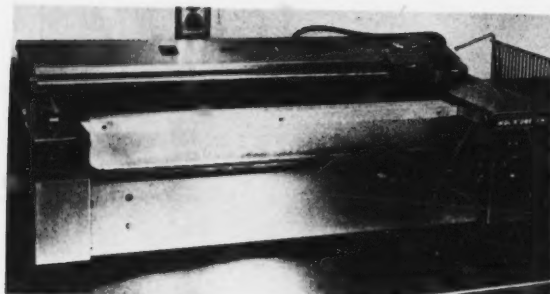


c. _____

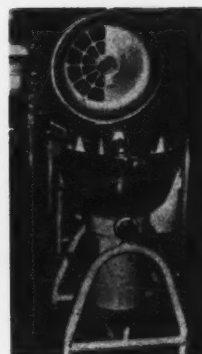


d. _____

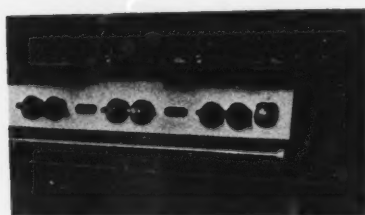
Written Test



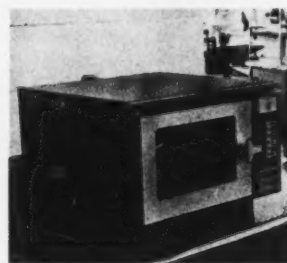
e. _____



f. _____



g. _____



h. _____

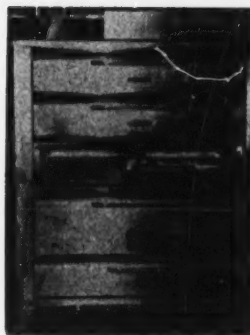
Written Test



i. _____



j. _____



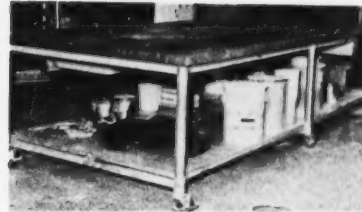
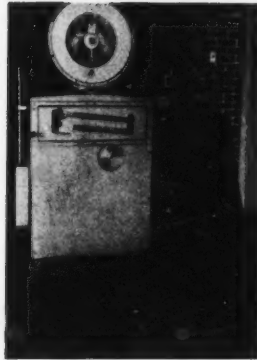
k. _____



l. _____

100

Written Test



m. _____ n. _____

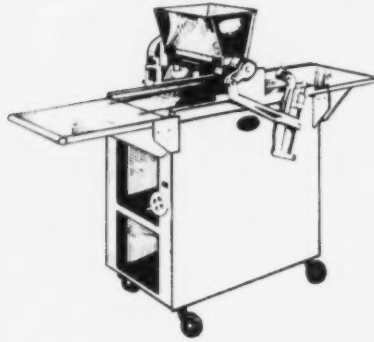
2. Select from a list equipment that must be sanitized just prior to use. Write an "X" in the blank before each piece of equipment that must be sanitized prior to use.

- _____ a. Doughnut machine
- _____ b. Deep fat fryer
- _____ c. Steam jacketed kettle
- _____ d. Vertical cutter mixer
- _____ e. Platform scales
- _____ f. Microwave oven
- _____ g. Work table
- _____ h. Bun or roll divider
- _____ i. Can opener
- _____ j. Blender
- _____ k. Mixer
- _____ l. Convection oven

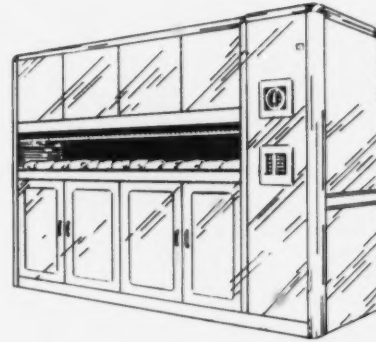
161

Written Test

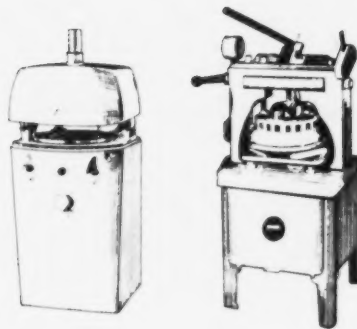
3. Identify the following types of commercial bakery equipment. Write the correct names in the blanks.



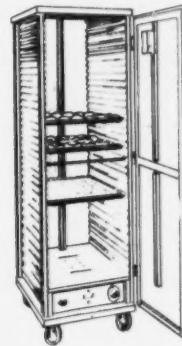
a. _____



b. _____



c. _____



d. _____

Written Test



e. _____

4. Match commercial bakery equipment with their characteristics. Write the correct numbers in the blanks.

- | | | |
|----------|---|------------------------|
| _____ a. | Cuts cookies in a variety of shapes; sizes cookies as needed; loads cut cookies on cookie pan | 1. Proofing cabinet |
| _____ b. | Ovens are placed directly on top of one another; used primarily for pies, breads, and other items that require a crisper bottom crust; usually has two heat controls regulating top and bottom heat | 2. Deck or stack oven |
| _____ c. | Maintains temperature and humidity needed for yeast action in dough; may be used for temporary storage of yeast products | 3. Cookie depositor |
| _____ d. | Divides dough into certain number of portions, usually 35; rounds individual portions into rolls; sizes individual rolls based on weight of main dough piece; saves time in weighing and rounding large quantities of rolls | 4. Reel oven |
| _____ e. | Distributes heat to product evenly due to rotation of shelves; bakes large quantities at the same time | 5. Bun or roll divider |

Written Test

5. Complete guidelines for operating bakery equipment. Circle the correct word(s).
- a. Learn the equipment's (brand name, safety features).
 - b. Learn how to use the (emergency stop, power disconnect).
 - c. Learn how to set up, use, and (position, clean) the equipment.
 - d. Do not wear (hair nets, rings).
 - e. Do not wear (loose clothing, long sleeves).
 - f. Before using the machine, disconnect it from the (power source, generator).
 - g. Check to see that all parts and (ingredients, safety features) are in the proper place.
 - h. Turn the (gears/speed, valve/time) to the proper setting.
 - i. Clear the work area of (unneeded, necessary) equipment and supplies
 - j. When cleaning and adjusting, turn off (power at electrical box, switches) prior to adjusting the speed.
 - k. Remove plug from socket; (do not pull, pull) from socket with the cord.
 - l. Follow manufacturer's directions for operation, cleaning, and (repairing, lubricating).
 - m. Notify a supervisor when in doubt about (location, use) of equipment.
 - n. Notify a supervisor when parts of the machine have been (misplaced, cleaned).
 - o. Notify a supervisor when machine is not (plugged in, running properly).
6. Select facts about safety requirements for equipment. Write the correct numbers in the blanks.
- _____ a. Which of the following is NOT a requirement for equipment training?
- 1. Machine repair
 - 2. Machine set up
 - 3. Machine use
 - 4. Machine cleaning

Written Test

- _____ b. Which of the following is the criterion for equipment training?
1. The operator must be able to use the equipment within a specified time frame.
 2. The operator must have at least one year's experience on the machine.
 3. The operator must be able to use the equipment to the satisfaction of the supervisor.
 4. The operator must be at least 21 years old.
- _____ c. Which of the following must the operator learn about the equipment during training.
1. The manufacturer's address and phone number
 2. How to use all safety features
 3. How to repair the equipment
 4. How to substitute a part from another piece of equipment
- _____ d. What must the operator learn during training?
1. The equipment must not be left unattended.
 2. All equipment must be operated in teams of at least two.
 3. Gloves must be worn when operating equipment.
 4. The supervisor must be present when the operator is using a piece of equipment.
- _____ e. Which part of the equipment must be sanitized just prior to use and before using the equipment to process other types of foods?
1. Racks and shelves
 2. All handles and knobs
 3. Food contact surfaces
 4. Motor

*Permission to duplicate this test is granted.

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**Use and Care of Equipment
Unit 4**

Unit Evaluation Form

Student Name _____ Unit Rating _____

Job Sheet 1—Operate a Doughnut Machine Rating _____

Comments: _____

Job Sheet 2—Clean a Doughnut Machine Rating _____

Comments: _____

Job Sheet 3—Operate a Waste Disposer Rating _____

Comments: _____

Job Sheet 4—Operate a Mixer Rating _____

Comments: _____

Job Sheet 5—Clean a Mixer Rating _____

Comments: _____

Job Sheet 6—Operate a Vertical Cutter Mixer Rating _____

Comments: _____

Job Sheet 7—Clean a Vertical Cutter Mixer Rating _____

Comments: _____

Job Sheet 8—Operate a Deep Fat Fryer Rating _____

Comments: _____

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Unit Evaluation Form

Job Sheet 9—Clean a Gas Deep Fat Fryer Rating _____

Comments: _____

Job Sheet 10—Clean an Electric Deep Fat Fryer Rating _____

Comments: _____

Job Sheet 11—Operate a Steam Jacketed Kettle Rating _____

Comments: _____

Job Sheet 12—Clean a Steam Jacketed Kettle Rating _____

Comments: _____

Job Sheet 13—Operate a Conventional Oven Rating _____

Comments: _____

Job Sheet 14—Clean a Conventional Oven Rating _____

Comments: _____

Job Sheet 15—Operate a Convection Oven Rating _____

Comments: _____

Job Sheet 16—Clean a Convection Oven Rating _____

Comments: _____

Job Sheet 17—Operate a Microwave Oven Rating _____

Comments: _____

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Unit Evaluation Form

Job Sheet 18—Clean a Microwave Oven Rating _____

Comments: _____

Job Sheet 19—Operate a Range Rating _____

Comments: _____

Job Sheet 20—Clean a Range Rating _____

Comments: _____

Job Sheet 21—Use Platform Scales Rating _____

Comments: _____

Job Sheet 22—Clean a Work Table Rating _____

Comments: _____

Job Sheet 23—Clean a Can Opener Rating _____

Comments: _____

Job Sheet 24—Operate a Blender Rating _____

Comments: _____

Job Sheet 25—Clean a Blender Rating _____

Comments: _____

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Unit Evaluation Form

Written Test Scores

Pretest _____

Posttest _____

Other _____

Other _____

Teacher Signature _____

Date _____

Student Signature _____

Date _____

*Permission to duplicate this form is granted.

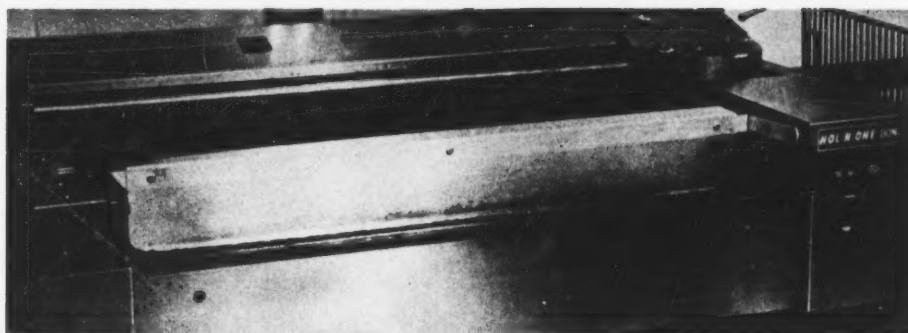
Use and Care of Equipment Unit 4

Information Sheet

1. Types of equipment

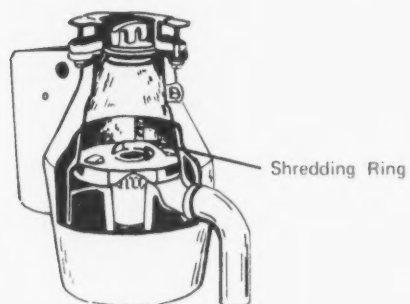
- a. Doughnut machine

Figure 1



- b. Waste disposer

Figure 2



Information Sheet

c. Mixer

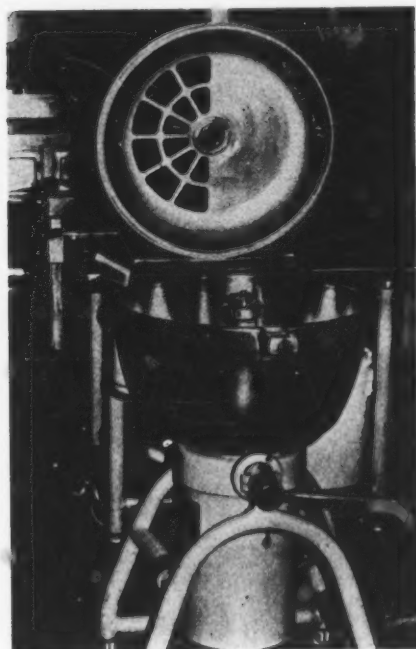
Figure 3



Information Sheet

- d. Vertical cutter mixer (VCM)

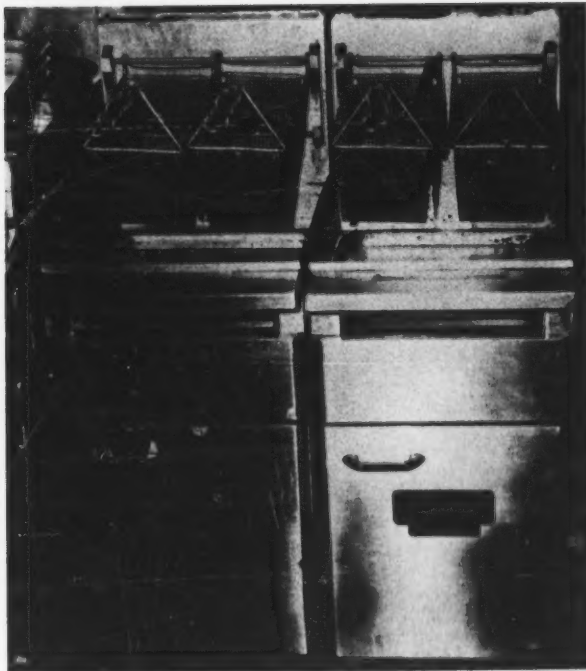
Figure 4



Information Sheet

- e. Deep fat fryer

Figure 5



Information Sheet

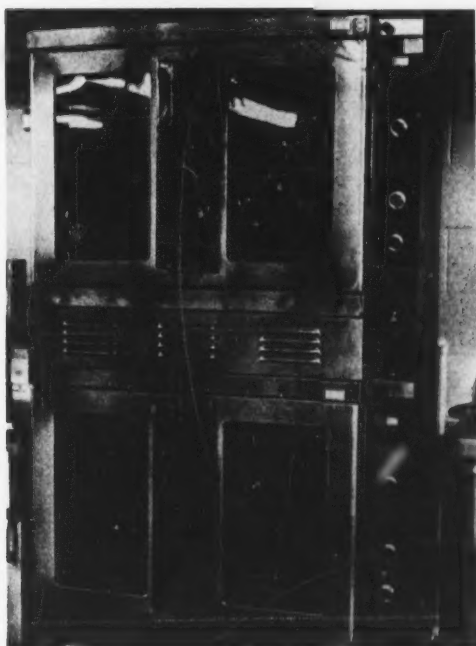
- f. Steam jacketed kettle

Figure 6



- g. Conventional oven

Figure 7



Information Sheet

h. Convection oven

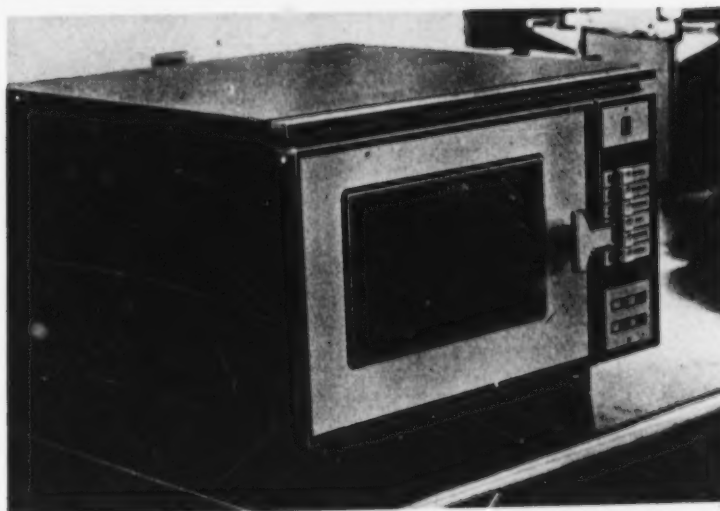
Figure 8



Information Sheet

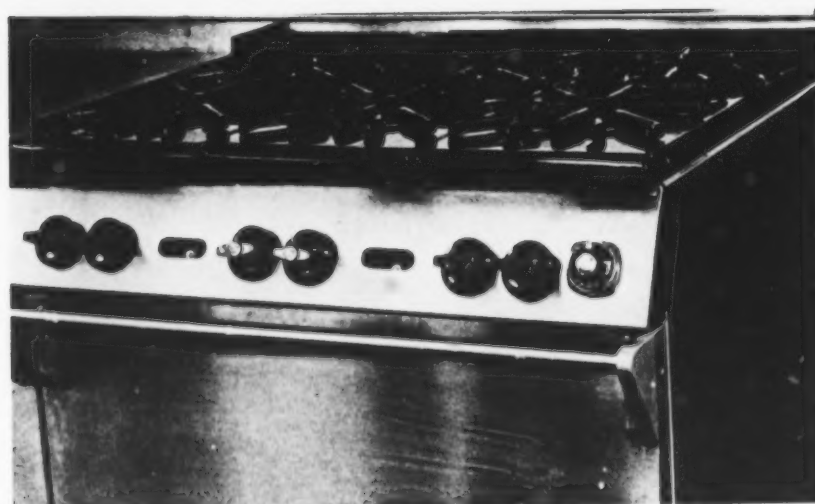
- i. Microwave oven

Figure 9



- j. Range

Figure 10



Information Sheet

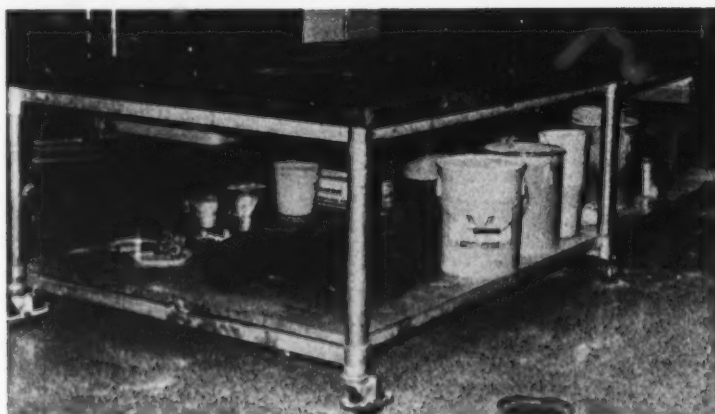
- k. Platform scale

Figure 11



- l. Work table

Figure 12



Information Sheet

- m. Can opener

Figure 13

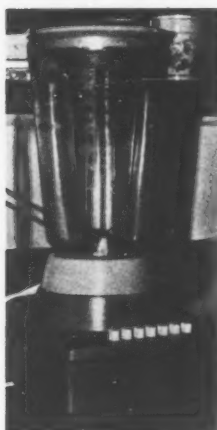


Figure 14



- n. Blender

Figure 15



2. Equipment that must be sanitized just prior to use

- a. Doughnut machine
- b. Mixer
- c. Vertical cutter mixer
- d. Platform scales

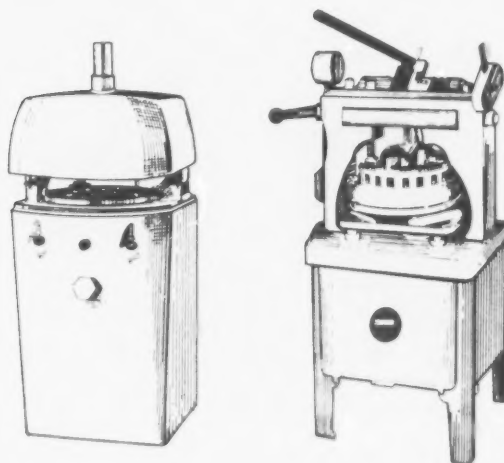
Information Sheet

- e. Work table
- f. Can opener
- g. Blender

3. Types of commercial bakery equipment (Figures 16-20)

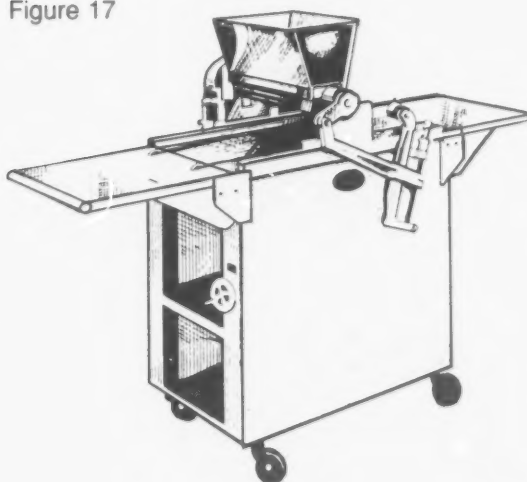
- a. Bun or roll divider

Figure 16



- b. Cookie depositor

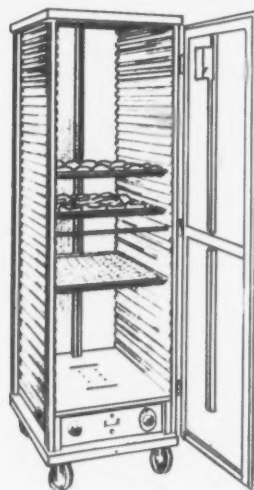
Figure 17



Information Sheet

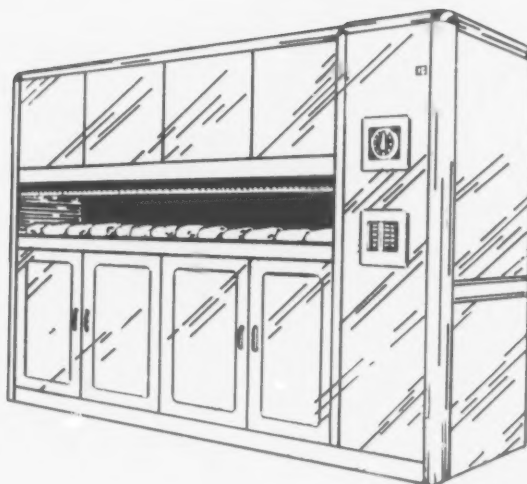
- c. Proofing cabinet

Figure 18



- d. Reel oven

Figure 19



Information Sheet

- e. Deck or stack ovens

Figure 20



4. Characteristics of commercial bakery equipment

- a. Bun or roll divider

Note: Some dividers are totally automatic while others require some manual labor.

- Divides dough into certain number of portions; usually 35
- Rounds individual portions into rolls
- Sizes individual rolls based on weight of main dough piece

Example: 2 lb. 4 oz. dough = 36 1-ounce rolls

- Saves time in weighing and rounding large quantities of rolls

Information Sheet

b. Cookie depositor

Note: Manual or automatic cookie depositors are available.

- Cuts cookies in a variety of shapes
- Sizes cookies as needed
- Loads cut cookies on cookie pan

c. Proofing cabinet

- Maintains temperature and humidity needed for yeast action in dough
- May be used for temporary storage of yeast products

d. Reel oven

- Distributes heat to product evenly due to rotation of shelves
- Bakes large quantities at the same time

Note: A reel oven will hold from 6 to 64 baking pans. Its height is excellent for loading and unloading products, and a peel is not needed to reach baking pans.

e. Deck or stack oven

- Ovens placed directly on top of one another
- Used primarily for pies, breads, and other items that require a crisper bottom crust
- Usually has two heat controls regulating top and bottom heat

Note: It is difficult to regulate sections to bake at the same rate.

5. Guidelines for operating equipment

a. Training operator

- Learn the equipment's safety features.
- Learn how to use the emergency stop.
- Learn how to set up, use, and clean the equipment.

Information Sheet

- b. Using electrical equipment
 - Do not wear rings.
 - Do not wear loose clothing.
- c. Before using
 - Disconnect machine from the power source.
 - Check to see that all parts and safety features are in the proper place.
 - Turn the gears or speed to the proper setting.
 - Clear the work area of unneeded equipment and supplies.
- d. Cleaning or adjusting
 - Turn off switches prior to adjusting the speed.
 - Remove plug from socket; do not pull from socket with the cord.
- e. Following manufacturer's directions
 - Follow operation instructions.
 - Follow cleaning instructions.
 - Follow lubricating instructions.
- f. Notifying supervisor
 - Notify a supervisor when in doubt about use of equipment.
 - Notify a supervisor when parts of the machine have been misplaced.
 - Notify a supervisor when the machine is not running properly.

6. Safety requirements for equipment

- a. The operator *must* be trained; training should include a demonstration by the supervisor on how to set-up, use, and clean equipment.
- b. The operator must be able to use the equipment to the satisfaction of the supervisor.
- c. The operator must know and use all safety features on the equipment.

Information Sheet

- d. The equipment should not be left unattended.
- e. Pieces of equipment that have parts that will come in direct contact with food must be sanitized just prior to use and before using to process other types of foods.

Note: Purple film buildup on stainless steel surfaces indicates protein residue from improper cleaning. Sanitizing solution should be maintained in a spray bottle and applied lightly with a fine mist to food contact surfaces just prior to use.

Use and Care of Equipment Unit 4

Job Sheet 1—Operate a Doughnut Machine

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Doughnuts cooked at recommended time and temperature for variety being prepared	_____
Doughnuts not over- or under-cooked	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment, tools and materials

Doughnut machine
Doughnut shortening
Doughnut batter

B. Procedure

- ☐ 1. Fill the fryer with shortening.

Note: Use enough shortening to cover heater elements and thermostat bulb.

- ☐ 2. Turn heater control switch to 250 degrees Fahrenheit.

- ☐ 3. Melt all of the shortening.

- ☐ 4. Set the temperature control to 375 degrees Fahrenheit.

- ☐ 5. Switch on the conveyor motor to see that the conveyor operates freely.

- ☐ 6. Time the revolutions of the dropper and the conveyor.

Note: The dropper should be in the center of the flight pocket.

- ☐ 7. Retard or advance as necessary.

Job Sheet 1

- ☐ 8. Consult the recommended temperature and time chart for the variety of doughnut being prepared.

Note: See manufacturer's directions. Temperature will usually be between 370 degrees and 380 degrees Fahrenheit.

- ☐ 9. Set the speed according to the variety of doughnut.
- ☐ 10. Load the hopper with batter.
- ☐ 11. Begin operation.

Note: Adjust the dropper if necessary so that the doughnuts are dropping as close to the front flight as possible.

- ☐ 12. Cook the desired number of doughnuts.
- ☐ 13. Turn the machine off.
- ☐ 14. Clean the machine.

Note: Follow the procedure in Job Sheet 2 or the manufacturer's instructions.

- ☐ 15. Return tools and materials to proper storage.
- ☐ 16. Clean the work area.

Evaluator's comments: _____

Use and Care of Equipment Unit 4

Job Sheet 2—Clean a Doughnut Machine

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Doughnut machine properly assembled	_____
Doughnut machine clean and ready for next use	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment, tools and materials

Doughnut machine
Filter cone and holder
Detergent solution

Shortening container
Gong brush
Clean cloths

B. Procedure

Note: Follow the manufacturer's directions for doughnut machines. Operation and cleaning procedures vary with the brand and model.

- ☐ 1. Turn the machine off.
- ☐ 2. Unplug the machine.
- ☐ 3. Let the shortening cool.
- ☐ 4. Drain the shortening.
- ☐ 5. Filter the shortening through the filter cone into the shortening container.
- ☐ 6. Remove the conveyor.
- ☐ 7. Take the conveyor to the pot and pan sink.
- ☐ 8. Tilt the heater coils back.

Job Sheet 2

- ☐ 9. Remove the fryer tank.
- ☐ 10. Wipe excess shortening from the inside of the kettle.
- ☐ 11. Flush the inside of the kettle with warm shortening.
- ☐ 12. Close the drain valve.
- ☐ 13. Clean the in-feed end of the conveyor with a damp cloth.
- ☐ 14. Lower the coils into the fryer kettle.
- ☐ 15. Fill the fryer with water.
- ☐ 16. Add detergent solution.
- ☐ 17. Connect the power.
- ☐ 18. Turn on the heater.
- ☐ 19. Bring the solution to a boil.
- ☐ 20. Boil for 15 to 20 minutes.
- ☐ 21. Scrub the other machine parts while the solution is boiling.
- ☐ 22. Turn off the heater.
- ☐ 23. Disconnect the power.
- ☐ 24. Allow the detergent solution to cool.
- ☐ 25. Tilt the heater coils back.
- ☐ 26. Wipe the coils with a clean cloth.
- ☐ 27. Drain the cleaning solution.
- ☐ 28. Lower the coils into the fryer.
- ☐ 29. Close the drain.
- ☐ 30. Fill fryer with water.
- ☐ 31. Turn on the power.

Job Sheet 2

- ☐ 32. Turn on the heater.
- ☐ 33. Heat to 180 degrees Fahrenheit for 15 minutes.
- ☐ 34. Turn off the heater.
- ☐ 35. Allow the rinse water to cool.
- ☐ 36. Drain the water.
- ☐ 37. Close the drain.
- ☐ 38. Reassemble cleaned machine parts.
- ☐ 39. Cover the cleaned machine.
- ☐ 40. Return tools and materials to proper storage.
- ☐ 41. Clean the work area.

Evaluator's comments: _____

Use and Care of Equipment **Unit 4**

Job Sheet 3—Operate a Waste Disposer

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Wet garbage thoroughly ground up and disposed of	_____
Disposer clean and ready for next use	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment, tools and materials

Waste disposer
Wet garbage
Detergent

B. Procedure

- ☐ 1. Press the "ON" switch.

Note: The water will come on automatically. If the water does not come on, turn the machine off immediately.

- ☐ 2. Feed garbage gradually into the mouth of the disposer.

Caution: Keep fingers and hands out of the unit.

- ☐ 3. Feed only items that can be readily ground up.

Note: Do not feed such things as bones, cobs, coffee grounds or shortening.

Caution: Do not overload the unit.

Job Sheet 3

- ☐ 4. Run the unit for 5 minutes after the grinding stops.
- ☐ 5. Clean the unit.
 - a. Turn the switch to the "OFF" position.
 - b. Wash the unit exterior with mild detergent.
- ☐ 6. Return tools and equipment to proper storage.
- ☐ 7. Clean the work area.

Evaluator's comments: _____

Use and Care of Equipment Unit 4

Job Sheet 4—Operate a Mixer

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Proper agitator selected	_____
Mixer stopped when scraping down sides of bowl	_____
Ingredients mixed to degree specified in recipe	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment, tools and materials

Mixer
Agitator
Food to be mixed

B. Procedure

- ☐ 1. Place a mixing bowl of the desired size into position on the mixer.
- ☐ 2. Lock the back catch.
- ☐ 3. Lock the bowl pin on each side.
- ☐ 4. Lower the bowl to the lowest level on the slideway.
- ☐ 5. Select the proper agitator.
 - a. Use a flat beater for general mixing, mixing batters, or whipping potatoes (Figure 1).

Note: Do not use a flat beater for heavy doughs.

Job Sheet 4

Figure 1



- b. Use a wire whip to incorporate air into light mixtures or for other light and fast operations (Figure 2).

Figure 2



- c. Use a dough hook for yeast raised doughs, including breads and rolls (Figure 3).

Job Sheet 4

Figure 3



- d. Use a pastry knife to combine shortening with flour, and to mix biscuits, pie crusts and shortcakes (Figure 4).

Figure 4



- ☐ 6. Slip the agitator onto the shaft.
- ☐ 7. Lock the agitator in place.
- ☐ 8. Lift the bowl into position.

Note: The agitator should not touch the bottom of the bowl. If it does, adjust the bowl position, then proceed.

- ☐ 9. Lower the bowl.
- ☐ 10. Select the desired speed.
- ☐ 11. Place the food to be mixed in the bowl.

Job Sheet 4

- ☐ 12. Raise the bowl back to mixing position.
- ☐ 13. Push the motor start button.
- ☐ 14. Stop the machine before scraping down the sides of the bowl.

Caution: Never place your hand or any utensil in the mixing bowl during mixing.

- ☐ 15. Turn the motor off when mixing is complete.
- ☐ 16. Lower the bowl.

Note: Do not lower the bowl until the agitator motion has completely stopped.

- ☐ 17. Remove the agitator.
- ☐ 18. Remove the food from the bowl.

Note: If wheels are available, the bowl may be lowered to the wheels and taken to the preparation area.

- ☐ 19. Clean the mixer.

Note: Follow the procedure in Job Sheet 5 or the manufacturer's directions.

- ☐ 20. Return tools and materials to proper storage.
- ☐ 21. Clean the work area.

Evaluator's comments: _____

Use and Care of Equipment Unit 4

Job Sheet 5—Clean a Mixer

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criterion	Rating
Mixer thoroughly clean and ready for next use	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criterion.

A. Equipment, tools and materials

Mixer with agitator
Gong brush
Clean cloths
Detergent solution

B. Procedure

- ☐ 1. Turn the machine off and remove the plug from the outlet.
- ☐ 2. Remove the bowl.
- ☐ 3. Remove the agitator.
- ☐ 4. Take the bowl and agitator to the pot and pan sink for cleaning.
- ☐ 5. Clean the bowl and agitator in detergent solution using a gong brush.
- ☐ 6. Rinse the bowl and agitator.
- ☐ 7. Let the bowl and agitator air dry.
- ☐ 8. Scrub the beater shaft.
- ☐ 9. Scrub the bowl saddle.

Job Sheet 5

- ☐ 10. Scrub the base.

Note: If the mixer has a removable saddle apron cover plate and metal ring, clean behind them daily.

- ☐ 11. Wipe off suds and food particles with a cloth and hot clean water.
- ☐ 12. Dry the mixer with a clean cloth.
- ☐ 13. Return tools and materials to proper storage.
- ☐ 14. Clean the work area.

Evaluator's comments: _____

Use and Care of Equipment Unit 4

Job Sheet 6—Operate a Vertical Cutter Mixer

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Vertical cutter mixer set up properly for the process used	_____
Food processed properly (mixed, cut, or kneaded)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment, tools and materials

Vertical cutter mixer (VCM)
Mixing baffle
Handle
Blade assembly

Cutting board
French knife
Clean cloths
Food to be processed

B. Procedure

Caution: Each different process, mixing, cutting, or kneading, requires a different setup; refer to specific instructions for each process.

- ☐ 1. Lock the mixing bowl in the upright position.
- ☐ 2. Place the plastic basket in the VCM bowl if needed for the desired process.

Note: Some foods, such as meats or bread dough, do not require the use of the basket.

- ☐ 3. Install the correct blade assembly for the desired process.

Caution: Always handle the blade assembly by the shank.

Job Sheet 6

- ☐ 4. Secure the blade with the retaining nut; finger tighten only.
- ☐ 5. Install the mixing baffle only when cutting and mixing dry ingredients.
Note: The baffle removes dry ingredients from the sides of the bowl.
- ☐ 6. Prepare the food for cutting or mixing.
Note: As an example, lettuce must be cut in quarters; follow the recipe in all cases.
- ☐ 7. Place the ingredients in the bowl.
Note: Fill the bowl two-thirds full of water if cutting or mixing vegetables.
- ☐ 8. Close the cover and lock it.

Caution: Never operate a VCM unit unless the cover is properly locked in place.

- ☐ 9. Select the speed which is given in the recipe.
 - a. "Jog" cuts and mixes for about one second when the start button is pressed and will stop automatically.
 - b. "Run" cuts and mixes continuously when the start button is pressed, and will not stop until the stop button is pushed.
- ☐ 10. Wait for blades to stop turning after the operation is complete.
- ☐ 11. Unlock and raise the cover to its full open position.
- ☐ 12. Loosen the retaining nut and carefully remove the blade assembly.
- ☐ 13. Remove the food by lifting the plastic basket and allowing it to drain or by tilting the VCM for dry products and doughs.
- ☐ 14. Wipe or rinse out any food left in the bowl using a clean cloth.

Job Sheet 6

- ☐ 15. Rinse the bowl and parts with hot water after each use.

Caution: When working with potentially hazardous foods, equipment must be thoroughly cleaned and sanitized between types of foods to prevent cross-contamination.

Note: To thoroughly clean the VCM, follow the procedure in Job Sheet 7 or the manufacturer's directions.

- ☐ 16. Return tools and materials to proper storage.
- ☐ 17. Clean the work area.

Evaluator's comments: _____

Use and Care of Equipment Unit 4

Job Sheet 7—Clean a Vertical Cutter Mixer

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criterion	Rating
Vertical cutter mixer clean, sanitized and ready for the next use	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criterion.

A. Equipment, tools and materials

Vertical cutter mixer
Gong brush
Clean cloths

Detergent solution
Sanitizing solution
Stainless steel polish

B. Procedure

- ☐ 1. Unlock and raise the cover to its full open position.
- ☐ 2. Loosen the retaining nut and remove the blade assembly.

Caution: Always handle the blade assembly by the shank.

- ☐ 3. Set the blades on the counter.
- ☐ 4. Remove the mixing baffle or lift the plastic basket up and out of the bowl.

Note: The mixing baffle and plastic basket are never used at the same time.

- ☐ 5. Take the blade assembly and mixing baffle or plastic basket to the pot and pan sink.
- ☐ 6. Wash the parts in detergent solution.
- ☐ 7. Rinse the parts thoroughly.

Job Sheet 7

- ☐ 8. Allow the parts to air dry.
- ☐ 9. Unlock and tilt the VCM bowl down to remove any remaining food or water.
- ☐ 10. Fill the bowl about one-third full of water and add detergent solution.
- ☐ 11. Scrub the bowl, cover, and outside of the VCM.
- ☐ 12. Drain the detergent solution by tilting the bowl.
- ☐ 13. Rinse all surfaces with clean water.
- ☐ 14. Dry the outside surfaces.
- ☐ 15. Spray the inside of the bowl with sanitizing solution.
- ☐ 16. Allow the inside of the bowl to air dry.
- ☐ 17. Return the bowl to its upright position, lock in place, and lower the cover until the next use.
- ☐ 18. Polish stainless steel surfaces with stainless steel polish.
- ☐ 19. Return tools and materials to proper storage.
- ☐ 20. Clean the work area.

Evaluator's comments: _____

Use and Care of Equipment Unit 4

Job Sheet 8—Operate a Deep Fat Fryer

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Safety precautions observed	_____
Food fried to uniform doneness	_____
Pieces not stuck together	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment, tools and materials

Deep fat fryer
Shortening for fryer
Serving pan with perforated insert
Tongs
Food to be deep fat fried

B. Procedure

- ☐ 1. Close the shortening outlet.
- ☐ 2. Fill the fryer with shortening to the fill level line indicator.
- ☐ 3. Turn the heat source on.
- ☐ 4. Set the thermostat to 250 degrees Fahrenheit.
- ☐ 5. Allow the shortening to melt.

Note: This will take approximately 10 minutes.

Job Sheet 8

- ☐ 6. Set the thermostat to the desired temperature for the type of food to be fried.

Caution: Do not heat the shortening above 400 degrees Fahrenheit.

- ☐ 7. Fill the fry basket no more than two-thirds full with food of uniform size.
- ☐ 8. Allow foods that have been freshly battered to drain before frying.
- ☐ 9. Submerge the basket slowly into the hot shortening.

Caution: Submerging must be done slowly. Moisture from food, especially frozen food, causes shortening to foam and to bubble.

- ☐ 10. Shake the basket occasionally if pieces of food tend to stick together.
- ☐ 11. Fry the food for the amount of time specified in the recipe.
- ☐ 12. Hang the basket on the hook or bar to drain for 10 to 15 seconds.
- ☐ 13. Remove the food from the basket.

Note: Pour food out or use tongs.

- ☐ 14. Place the food in a serving pan with a perforated insert.
- ☐ 15. Turn the thermostat down as soon as frying is complete.

Note: During idle periods, the thermostat should be set on 200 degrees Fahrenheit.

- ☐ 16. Return tools and equipment to proper storage.
- ☐ 17. Clean the work area.

Evaluator's comments: _____

Use and Care of Equipment Unit 4

Job Sheet 9—Clean a Gas Deep Fat Fryer

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Deep fat fryer thoroughly clean and ready for next use	_____
Waste fat disposed of properly	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment, tools and materials

Gas deep fat fryer	Detergent solution
Shortening filter cone and holder	Long handled gong brush
Shortening container	Clean cloths
Waste shortening container	Large pot

B. Procedure for cleaning after each shift

- ☐ 1. Allow the shortening to cool but not to solidify.
- ☐ 2. Drain and strain the shortening.
 - a. Place the filter cone in its holder over the shortening container.
 - b. Place the shortening container with filter below the drain.
 - c. Open the drain.
 - d. Allow the shortening to drain out.
 - e. Close the drain after all of the shortening has been removed.
- ☐ 3. Fill the fryer with detergent solution.
- ☐ 4. Scrub the inside and outside of the unit.

Job Sheet 9

- ☐ 5. Place a large pot below the drain.
- ☐ 6. Open the drain and allow the detergent solution to drain out.
- ☐ 7. Rinse the fryer thoroughly with clean hot water.
- ☐ 8. Wipe the fryer dry.
- ☐ 9. Close the drain.
- ☐ 10. Refill the fryer with strained shortening.
- ☐ 11. Cover the fryer until the next use.

C. Procedure for cleaning before changing to new shortening

- ☐ 1. Allow the shortening to cool but not to solidify.
- ☐ 2. Drain the shortening.
- ☐ 3. Dispose of the used shortening in the waste shortening container.
- ☐ 4. Flush the unit thoroughly to remove all sediment.
- ☐ 5. Close the drain.
- ☐ 6. Fill the fryer with detergent solution.
- ☐ 7. Turn on the fryer.
- ☐ 8. Heat to 180 degrees Fahrenheit for 15 minutes.
- ☐ 9. Scrub the inside of the fryer.
- ☐ 10. Place a large pot under the drain.
- ☐ 11. Open the drain.
- ☐ 12. Drain the fryer.
- ☐ 13. Rinse the unit thoroughly.
- ☐ 14. Empty the pot of detergent solution.
- ☐ 15. Close the drain.

Job Sheet 9

- ☐ 16. Refill the unit with hot water.
- ☐ 17. Brush all inside surfaces of the fryer.
- ☐ 18. Place a large pot under the drain.
- ☐ 19. Open the drain.
- ☐ 20. Drain out the hot water.
- ☐ 21. Rinse the fryer thoroughly.
- ☐ 22. Dry the fryer thoroughly.
- ☐ 23. Empty the pot of rinse water.
- ☐ 24. Close the drain.
- ☐ 25. Fill the unit with new shortening.
- ☐ 26. Cover the fryer.
- ☐ 27. Return tools and materials to proper storage.
- ☐ 28. Clean the work area.

Evaluator's comments: _____

Use and Care of Equipment Unit 4

Job Sheet 10—Clean an Electric Deep Fat Fryer

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criterion	Rating
Deep fat fryer thoroughly clean and ready for next use	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criterion.

A. Equipment, tools and materials

Electric deep fat fryer
Clean insert
Shortening filter machine or container with filter
Gong brush
Clean cloths
Detergent solution

B. Procedure

Note: Follow this procedure after each use.

- ☐ 1. Allow the shortening to cool but not to solidify.
- ☐ 2. Lift the calrod unit from the shortening.
- ☐ 3. Lock the calrod into position.
- ☐ 4. Turn on the fryer to 180 degrees Fahrenheit.

Note: Calrod units are self-cleaning.

- ☐ 5. Drain or pump the shortening from the fryer through a filter into a clean container.
- ☐ 6. Remove the soiled insert from the fryer.
- ☐ 7. Take the insert to the pot and pan sink.

Job Sheet 10

- ☐ 8. Clean the insert in detergent solution.
- ☐ 9. Rinse the insert and allow it to air dry.
- ☐ 10. Turn off the fryer.
- ☐ 11. Allow the unit to cool.
- ☐ 12. Scrub the outside of the unit.
- ☐ 13. Rinse the outside of the unit and wipe it dry.
- ☐ 14. Place a clean insert into the unit.
- ☐ 15. Lower the calrod unit into the fryer.
- ☐ 16. Replace the filtered shortening or add new shortening as required.
- ☐ 17. Cover the fryer.
- ☐ 18. Return tools and materials to proper storage.
- ☐ 19. Clean the work area.

Evaluator's comments: _____

Use and Care of Equipment Unit 4

Job Sheet 11—Operate a Steam Jacketed Kettle

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Food cooked to the desired doneness	_____
Food removed from kettle promptly to avoid overcooking	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment, tools and materials

Steam jacketed kettle
Food to be cooked
Water as necessary
Skimmer, paddle, or ladle

B. Procedure

- ☐ 1. Set up the steam jacketed kettle according to the supervisor's instruction.
- ☐ 2. Check the steam gauge for the correct operating steam pressure.

Note: If adequate pressure has not been reached, notify your instructor.

- ☐ 3. Adjust the kettle to an upright level position.
- ☐ 4. Fill the kettle with food or water.

Note: Food or water should not exceed three quarters of the capacity of the kettle. Preheat the water if necessary.

Job Sheet 11

- ☐ 5. Turn on the steam control valve.

Caution: Valves, lines, and jackets are extremely hot when steam is on.

- a. Turn the dial clockwise.
 - b. Open the valve completely for the highest temperature.
 - c. Close the valve partially for simmering.
- ☐ 6. Complete cooking according to the directions in the recipe.
- ☐ 7. Close the steam control valve.
- ☐ 8. Remove the food to prevent overcooking.
- a. Liquid may be drawn off through the draw-off valve before the food is removed.
 - b. Food may be strained from the broth.
 - c. Food may be poured if the kettle tilts.
 - d. Food may be skimmed with a skimmer.
- ☐ 9. Clean the steam jacketed kettle.
- Note: Follow the procedure in Job Sheet 12 or the manufacturer's directions.
- ☐ 10. Return tools and materials to proper storage.
- ☐ 11. Clean the work area.

Evaluator's comments: _____

Use and Care of Equipment Unit 4

Job Sheet 12—Clean a Steam Jacketed Kettle

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criterion	Rating
Steam jacketed kettle thoroughly clean and ready for next use	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criterion.

A. Equipment, tools and materials

Steam jacketed kettle
Long handled gong brush
Clean cloths
Detergent solution

B. Procedure

- ☐ 1. Turn off the steam.
- ☐ 2. Allow the kettle to cool.
- ☐ 3. Open the drain.
Note: Smaller pots may not have drains.
- ☐ 4. Flush the kettle with water.
- ☐ 5. Close the drain.
- ☐ 6. Remove the drain screen.
- ☐ 7. Fill the kettle to cover the highest food line with water.
- ☐ 8. Add detergent solution.
- ☐ 9. Scrub the kettle inside and outside.

Job Sheet 12

- ☐ 10. Open the valve and allow the solution to drain.

Note: If the kettle tilts, the solution may be poured out.

- ☐ 11. Scrub the internal valve assembly.

- ☐ 12. Rinse the kettle.

- ☐ 13. Close the drain.

- ☐ 14. Allow the inside of the kettle to air dry.

- ☐ 15. Wipe the outside of the kettle.

- ☐ 16. Close the cover.

Note: Smaller or older kettles may not have covers.

- ☐ 17. Return tools and equipment to proper storage.

- ☐ 18. Clean the work area.

Evaluator's comments: _____

Use and Care of Equipment Unit 4

Job Sheet 13—Operate a Conventional Oven

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Oven preheated to desired temperature before inserting food	_____
Pans evenly spaced in oven	_____
Food cooked to desired doneness	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment, tools and materials

Conventional oven
Pan of food to be cooked
Oven mitt or pot holder

B. Procedure

Note: This procedure is written for a gas oven. Begin with step 2 for an electric oven.

- ☐ 1. Turn the temperature control switch to medium or high.
- ☐ 2. Turn the thermostat to the desired temperature.
- ☐ 3. Allow the oven to preheat to the desired temperature.
- ☐ 4. Place the food in the oven only when the proper temperature has been reached.

Note: The temperature should be checked with an accurate internal oven thermometer.

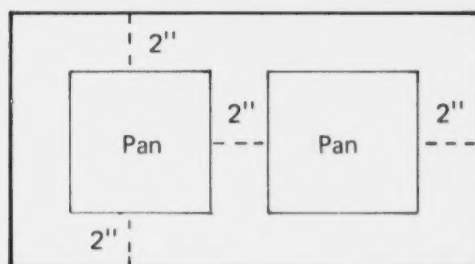
- ☐ 5. Load the oven evenly (Figure 1).
 - a. Pans should be 2 inches away from the door.

Job Sheet 13

- b. Pans should be 2 inches away from each other.
- c. Pans should be 2 inches away from the walls of the oven.

Caution: Do not rest heavy pans on the open oven door.

Figure 1



- ☐ 6. Cook the food as directed in the recipe.

Note: Follow the recipe for cooking time and testing for doneness.

- ☐ 7. Remove the cooked food from the oven.

Caution: Use an oven mitt or pot holder.

- ☐ 8. Turn off the oven.
- ☐ 9. Return tools and materials to proper storage.
- ☐ 10. Clean the work area.

Evaluator's comments: _____

Use and Care of Equipment Unit 4

Job Sheet 14—Clean a Conventional Oven

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criterion	Rating
Oven thoroughly clean and ready for next use	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criterion.

A. Equipment, tools and materials

Conventional oven
Long handled metal scraper
Long handled brush
Gong brush

Clean cloths
Detergent solution
Stainless steel polish

B. Procedure for daily cleaning

- ☐ 1. Turn off oven; allow the oven to cool.
- ☐ 2. Remove the shelves from the oven.
- ☐ 3. Take the shelves to the pot and pan sink.
- ☐ 4. Wash the shelves.
- ☐ 5. Allow the shelves to air dry.
- ☐ 6. Scrape any burned particles from the inside of the oven.
- ☐ 7. Brush out the inside of the oven.
- ☐ 8. Replace the shelves.
- ☐ 9. Wash the outside of the oven door.
- ☐ 10. Wash the outside of the frame.

Job Sheet 14

- ☐ 11. Rinse the washed areas.
- ☐ 12. Wipe all surfaces dry.
- C. Procedure for weekly cleaning
 - ☐ 1. Turn off the oven; allow the oven to cool.
 - ☐ 2. Remove the shelves.
 - ☐ 3. Take the shelves to the pot and pan sink.
 - ☐ 4. Scrub the shelves.
 - ☐ 5. Rinse the shelves.
 - ☐ 6. Allow the shelves to air dry.
 - ☐ 7. Scrape any burned particles from the inside of the oven.
 - ☐ 8. Brush out the inside of the oven.
 - ☐ 9. Brush the shelf ledges.
 - ☐ 10. Brush the door crevices.
 - ☐ 11. Scrub the inside of the oven.
 - ☐ 12. Scrub the shelf ledges.
 - ☐ 13. Scrub the inside and outside of the door.
 - ☐ 14. Scrub the oven frame.
 - ☐ 15. Rinse the inside and outside of the oven.
 - ☐ 16. Wipe the outside of the oven dry.
 - ☐ 17. Wipe on stainless steel polish.
 - ☐ 18. Replace the shelves.
 - ☐ 19. Return tools and equipment to proper storage.

Job Sheet 14

- ☐ 20. Clean the work area.

Evaluator's comments: _____

Use and Care of Equipment

Unit 4

Job Sheet 15—Operate a Convection Oven

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Oven preheated to desired temperature before loading	_____
Pans evenly placed in oven	_____
Food cooked to desired doneness	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment, tools and materials

Convection oven
Pan of food to be cooked
Oven mitt or pot holder

B. Procedure

- ☐ 1. Turn the master switch on.
- ☐ 2. Turn the thermostat to the desired temperature.
- ☐ 3. Allow the oven to reach the desired temperature.

Note: Check the temperature with an internal oven thermometer.

- ☐ 4. Place the pan of food in the oven.
- ☐ 5. Load the oven evenly (Figure 1).

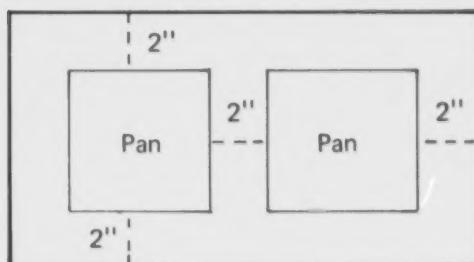
Note: Overloading the oven can cause uneven cooking.

- a. Pans should be 2 inches away from the door.
- b. Pans should be 2 inches away from each other.

Job Sheet 15

- c. Pans should be 2 inches away from the walls of the oven.

Figure 1



- ☐ 6. Cook the food as directed in the recipe.

Note: Convection ovens cook more quickly than conventional ovens; recipes for conventional ovens will need lower temperatures—decrease by 25 to 50 degrees Fahrenheit, and less time—decrease by one-third.

- ☐ 7. Remove the cooked food from the oven.

Caution: Use an oven mitt or pot holder.

- ☐ 8. Turn the master switch off.
- ☐ 9. Return tools and materials to proper storage.
- ☐ 10. Clean the work area.

Evaluator's comments: _____

Use and Care of Equipment Unit 4

Job Sheet 16—Clean a Convection Oven

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criterion	Rating
Oven thoroughly clean and ready for next use	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criterion.

A. Equipment, tools and materials

Convection oven
Long handled metal scraper
Long handled brush
Clean cloth

Gong brush
Detergent solution
Stainless steel polish

B. Procedure for daily cleaning

- ☐ 1. Turn off the oven.
- ☐ 2. Allow the oven to cool.
- ☐ 3. Remove the shelves from the oven.
- ☐ 4. Take the shelves to the pot and pan sink.
- ☐ 5. Scrub the shelves in detergent solution.
- ☐ 6. Rinse the shelves and allow them to air dry.
- ☐ 7. Scrape any burned particles from the inside of the oven.
- ☐ 8. Brush out the inside of the oven.
- ☐ 9. Brush the shelf ledges and the door crevices.
- ☐ 10. Replace the shelves.

Job Sheet 16

- ☐ 11. Wash the outside of the door.
 - ☐ 12. Wash the outside of the frame.
 - ☐ 13. Rinse the washed areas.
 - ☐ 14. Wipe all surfaces dry.
- C. Procedure for weekly cleaning
- ☐ 1. Turn off the oven; allow the oven to cool.
 - ☐ 2. Remove the shelves and side racks.
 - ☐ 3. Take the shelves and side racks to the pot and pan sink.
 - ☐ 4. Scrub the shelves and side racks.
 - ☐ 5. Rinse the shelves and side racks.
 - ☐ 6. Allow the shelves and side racks to air dry.
 - ☐ 7. Scrape any burned particles from the inside of the oven.
 - ☐ 8. Brush out the inside of the oven.
 - ☐ 9. Brush the door crevices.
 - ☐ 10. Scrub the inside of the oven.
 - ☐ 11. Scrub the inside and outside of the oven door.
 - ☐ 12. Scrub the frame.
 - ☐ 13. Rinse the inside and outside of the oven door.
 - ☐ 14. Replace the clean side racks and shelves.
 - ☐ 15. Wipe the outside of the oven dry.
 - ☐ 16. Polish the outside with stainless steel polish.
 - ☐ 17. Return tools and materials to proper storage.

Job Sheet 16

- ☐ 18. Clean the work area.

Evaluator's comments: _____

Use and Care of Equipment Unit 4

Job Sheet 17—Operate a Microwave Oven

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Food cooked in microwave safe dish	_____
Food cooked to desired doneness	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment, tools and materials

Microwave oven
Microwave safe cooking dish
Food to be cooked
Oven mitt or pot holder

B. Procedure

Caution: Before using microwave oven, read manufacturer's suggested operation for the particular type of oven.

- ☐ 1. Place food no more than 3 inches deep in the cooking dish.

Note: Use only microwave safe cooking containers of such materials as paper, glass, or plastic. Sealed pouches should have vent holes to allow for the escape of steam.

Caution: Metal should not be used in the cooking cavity. Sparks or fire may occur.

- ☐ 2. Open the door.

Job Sheet 17

- ☐ 3. Place the food in the oven.
- ☐ 4. Close the door.
- ☐ 5. Set the timer. .
- ☐ 6. Cook the food according to the recipe.

Note: When using a microwave oven, the operator should follow time guides as specified in a microwave cookbook. Microwave ovens are used for thawing, heating to room temperature, cooking to an edible temperature, and precooking. To equalize the cooking of food, liquid or semi-liquid food should be stirred during the cooking process. In some ovens the timer will have to be reset if the door is opened. For casseroles and foods that splatter easily, a paper towel should be placed on top of the food container.

- ☐ 7. Remove the food when cooking is complete.

Caution: An oven mitt or pot holder may be necessary, especially if food has been allowed to stand.

- ☐ 8. Clean the microwave oven.

Note: Follow the procedure in Job Sheet 18.

- ☐ 9. Return tools and equipment to proper storage.
- ☐ 10. Clean the work area.

Evaluator's comments: _____

Use and Care of Equipment Unit 4

Job Sheet 18—Clean a Microwave Oven

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criterion	Rating
Microwave oven thoroughly clean and ready for next use	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criterion.

A. Equipment, tools and materials

Microwave oven
Clean cloths
Paper towels
Mild detergent solution

B. Procedure

- ☐ 1. Turn off the oven.
- ☐ 2. Let the oven cool, if necessary.
- ☐ 3. Remove the trays.
- ☐ 4. Remove the splatter shield.
- ☐ 5. Wash the trays and splatter shield in mild detergent solution.
- ☐ 6. Rinse the trays and splatter shield.
- ☐ 7. Wipe the trays and splatter shield dry.
- ☐ 8. Wipe the inside of the oven with paper towels to remove any spills.
- ☐ 9. Wash the inside of the oven with mild detergent solution.
- ☐ 10. Rinse the inside of the oven.

Job Sheet 18

- ☐ 11. Wipe the inside of the oven dry.
- ☐ 12. Replace the trays and splatter shield.
- ☐ 13. Wash the inside of the door with mild detergent solution.
- ☐ 14. Inspect the door area for dents or cracks in the seal.

Caution: Notify instructor if any dents or cracks are found as they will allow microwave leakage.

- ☐ 15. Rinse the inside of the door.
- ☐ 16. Wipe all cleaned surfaces dry.
- ☐ 17. Return tools and materials to proper storage.
- ☐ 18. Clean the work area.

Evaluator's comments: _____

Use and Care of Equipment Unit 4

Job Sheet 19—Operate a Rotary Toaster

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criterion	Rating
Bread toasted to desired degree as indicated by pleasing color	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criterion.

A. Equipment, tools and materials

Rotary toaster
Pastry brush
Bread
Margarine or butter
Serving pan

B. Procedure

Note: Steps 3 through 5 are for gas models only.

- ☐ 1. Set the thermostat to five.
- ☐ 2. Turn the switch on allowing basket rotation to begin.
- ☐ 3. Insert a lighted match into the lighter hole.
- ☐ 4. Open the gas valve.
- ☐ 5. Inspect the flames.

Note: The front and back flames should be the same size and as large as possible without yellow tips.

- ☐ 6. Preheat the toaster for 10 to 15 minutes.
- ☐ 7. Run two slices of bread through the toaster.

Job Sheet 19

- ☐ 8. Adjust the thermostat if necessary.
- ☐ 9. Run the desired number of bread slices through the toaster.

Caution: If toast gets stuck in a basket, do not stick a knife in the unit. Let the unit run. Eventually the toast will fall out or burn and break into parts and the parts will fall out.

- ☐ 10. Brush butter or margarine on the toast.
- ☐ 11. Stack finished toast slices in the serving pan.
- ☐ 12. Turn off the toaster.
- ☐ 13. Return tools and materials to proper storage.
- ☐ 14. Clean the work area.

Evaluator's comments: _____

Use and Care of Equipment Unit 4

Job Sheet 20—Clean a Range

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criterion	Rating
Range thoroughly cleaned and ready for next use	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criterion.

A. Equipment, tools and materials

Range	Scraper
Gong brush	Detergent solution
Skillet	Stainless steel polish
Clean cloths	

B. Procedure

Note: The range should be cleaned daily.

- ☐ 1. Allow the range to cool.
- ☐ 2. Loosen all burned particles with a scraper.
- ☐ 3. Scrub the top of the range with detergent solution.

Note: Use only a very small amount of water on the range top.

- ☐ 4. Clean the back of the range top.
- ☐ 5. Rinse the cleaned areas.
- ☐ 6. Wipe all surfaces dry.
- ☐ 7. Remove the burner grids from the top of the range.
- ☐ 8. Take the grids to the pot and pan sink.

Job Sheet 20

- ☐ 9. Scrub the grids in detergent solution.
- ☐ 10. Rinse the grids.
- ☐ 11. Wipe the grids dry.
- ☐ 12. Replace the burner grids on top of the range.
- ☐ 13. Scrub the outside of the range; front, back, and sides.
- ☐ 14. Rinse the cleaned areas.
- ☐ 15. Wipe all outside surfaces dry.
- ☐ 16. Polish all trim with stainless steel polish.
- ☐ 17. Return tools and materials to proper storage.
- ☐ 18. Clean the work area.

Evaluator's comments: _____

Use and Care of Equipment Unit 4

Job Sheet 21—Use Platform Scales

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Correct weight of food obtained	_____
Scales immediately locked after use	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment, tools and materials

Platform scales
Food to be weighed

B. Procedure

- ☐ 1. Turn lock to allow the scales to move freely.
- ☐ 2. Place the food to be weighed on the platform.
- ☐ 3. Read the weight of the food on the indicator dial.

Note: Add weights to the counterbalance hook if needed.

- ☐ 4. Add to or remove from the amount of food on the platform to obtain a specific amount for a recipe.
- ☐ 5. Remove the food from the scales.
- ☐ 6. Lock the scales immediately.

Note: Platform scales should never be left unlocked.

- ☐ 7. Return tools and equipment to proper storage.

Job Sheet 21

- ☐ 8. Clean the work area.

Evaluator's comments: _____

Use and Care of Equipment Unit 4

Job Sheet 22—Clean a Work Table

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Work table thoroughly cleaned outside and in drawers	_____
Clean utensils returned to proper storage in drawers for next use	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment, tools and materials

Work table
Scraper
Gong brush
Clean dry cloths
Detergent solution
Sanitizing solution

B. Procedure

Note: Thoroughly clean the work table once a week. Follow steps 1 through 8 to clean the table throughout the day and at the end of the day.

- ☐ 1. Scrape the table top.
- ☐ 2. Remove all scrapings into a waste container.
- ☐ 3. Scrub the top and sides of the table.
- ☐ 4. Rinse the scrubbed areas.
- ☐ 5. Sanitize the table top.
- ☐ 6. Let the table top air dry.

Job Sheet 22

- ☐ 7. Wipe the sides of the table.
- ☐ 8. Wipe the shelf.
- ☐ 9. Remove all utensils from the drawers.
- ☐ 10. Remove the drawers from the table.
- ☐ 11. Take the drawers to the pot and pan sink.
- ☐ 12. Scrub the drawers inside and out.
- ☐ 13. Rinse the drawers.
- ☐ 14. Dry the drawers.
- ☐ 15. Wipe the drawer frames.
- ☐ 16. Rinse the drawer frames and wipe them dry.
- ☐ 17. Return the drawers to the table.
- ☐ 18. Put clean utensils back into the drawers.
- ☐ 19. Return tools and materials to proper storage.
- ☐ 20. Clean the work area.

Evaluator's comments: _____

Use and Care of Equipment Unit 4

Job Sheet 23—Clean a Can Opener

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Can opener thoroughly cleaned and double checked	_____
Can opener reassembled for next use	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment, tools and materials

Can opener
Brush
Clean cloths
Detergent solution
Sanitizing solution

B. Procedure

Caution: This piece of equipment is one of the most frequent causes of food contamination. Use special care when cleaning it.

- ☐ 1. Remove the can opener from the base plate.
- ☐ 2. Take the can opener to the pot and pan sink.
- ☐ 3. Scrub the blade and all parts.

Caution: Pay close attention to the area behind the blades.

- ☐ 4. Rinse the can opener.
- ☐ 5. Allow the can opener to air dry on a clean surface.

Job Sheet 23

- ☐ 6. Inspect the can opener for cleanliness.
Note: Reclean any areas that are suspect.
- ☐ 7. Sanitize food contact surfaces according to the directions on the sanitizing solution container.
- ☐ 8. Scrub the base plate attached to the table.
- ☐ 9. Rinse the base plate.
- ☐ 10. Replace the can opener on the base plate.
Note: The blade and other parts may be removed from electric can openers for cleaning.
- ☐ 11. Return tools and materials to proper storage.
- ☐ 12. Clean the work area.

Evaluator's comments: _____

Use and Care of Equipment Unit 4

Job Sheet 24—Operate a Blender

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Food blended to degree desired for recipe	_____
Lid on at all times when operating blender	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment, tools and materials

Blender
Rubber scraper
Food to be blended

B. Procedure

- ☐ 1. Follow the manufacturer's instructions for assembling the food container and agitator.
- ☐ 2. Place the food container on the base.
- ☐ 3. Place the substances to be blended in the food container.

Note: Consult the manufacturer's instructions for food items which can and cannot be blended in the food container.

- ☐ 4. Place the lid on the food container.
- ☐ 5. Secure the lid.
- ☐ 6. Connect the power cord.
- ☐ 7. Turn on the switch.

Job Sheet 24

- ☐ 8. Select the desired speed according to the recipe.

Note: The speed may be changed without stopping the machine.

- ☐ 9. Turn off the switch when the ingredients are of the desired consistency.

- ☐ 10. Remove the food container from the base and empty the contents using a rubber scraper.

- ☐ 11. Clean the blender.

Note: Follow the procedure in Job Sheet 25 or the manufacturer's directions.

- ☐ 12. Clean the work area.

Evaluator's comments: _____

Use and Care of Equipment Unit 4

Job Sheet 25—Clean a Blender

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criterion	Rating
Blender thoroughly clean and ready for next use	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criterion.

A. Equipment, tools and materials

Blender
Clean cloths
Detergent solution

B. Procedure

- ☐ 1. Unplug the blender.
- ☐ 2. Remove the food container from the base.
- ☐ 3. Take the food container to the pot and pan sink.
- ☐ 4. Disassemble the food container and agitator following the manufacturer's directions.
- ☐ 5. Wash the food container, agitator, and lid in detergent solution.
- ☐ 6. Rinse all parts thoroughly.
- ☐ 7. Allow the blender parts to air dry.
- ☐ 8. Wipe the blender base with a damp cloth.

Caution: Do not submerge the blender base in water.

Job Sheet 25

- ☐ 9. Polish the blender with a dry cloth.
- ☐ 10. Return tools and materials to proper storage.
- ☐ 11. Clean the work area.

Evaluator's comments: _____

Standard Recipe Use Unit 5

Objective Sheet

Unit Objective

After completing this unit, the student should be able to use and adjust standard recipes. The student should demonstrate these competencies by completing the assignment sheets, and by scoring a minimum of 85 percent on the written test.

Specific Objectives

After completing this unit, the student should be able to:

1. Match terms related to standard recipe use with their definitions.
2. List reasons for using a standardized recipe.
3. Match standard recipe headings with their descriptions.
4. Arrange in order the general procedure for following a standard recipe.
5. Write abbreviations of weights and measures used in standard recipes.
6. Write equivalents of weights and measures used in standard recipes.
7. Match common can sizes with their equivalents.
8. List reasons for accurate weighing and measuring.
9. List reasons for substitutions in standard recipes.
10. Complete statements about using a conversion table in adjusting standard recipes.
11. Convert weights and measures used in a standard recipe.
12. Complete the formula for adjusting yield on a standard recipe.
13. Select reasons for checking recipe calculations.
14. Complete guidelines for assembling supplies.
15. List ways to coordinate the use of needed equipment.

Objective Sheet

16. Select from a list guidelines for organizing work.
17. Complete statements about work simplification methods.
18. Select from a list guidelines for timing food preparation.
19. Reduce a recipe. (Assignment Sheet 1)
20. Increase a recipe. (Assignment Sheet 2)
21. Analyze a work situation. (Assignment Sheet 3)

Standard Recipe Use Unit 5

Suggested Activities

Instructional Plan

1. Read the unit carefully and plan for instruction. Study the specific objectives to determine the order in which you will present the objectives.
2. Review the teaching suggestions below and plan classroom activities. Integrate workplace skills as they apply to your vocational program.
3. Plan your presentation to take advantage of student learning styles and to accommodate special needs students.
4. Obtain materials to supplement instruction of this unit. See ordering information in the "Suggested Supplemental Resources" section.
5. Review instruction for evaluating student outcomes/performance and make copies of the Unit Evaluation Form.
6. Provide students with unit of instruction.
7. Discuss the unit and specific objectives.
8. Discuss student supplements and assign as appropriate. Explain to students that supplement exercises are not evaluated.
9. Discuss assignment sheets, and schedule due dates. Review criteria for evaluation of assignment sheets.
10. Discuss the use of the Unit Evaluation Form with the students, and select and discuss the rating scale that will be used for student evaluation.
11. Give written test.
12. Compile job sheet ratings and written test scores on the Unit Evaluation Form.
13. Reteach and retest as required.

Suggested Activities

Teaching Suggestions

Note: Skill areas appearing in boldface type in the Teaching Suggestions refer to the academic and workplace skills identified by the American Society for Training and Development (ASTD) and the U.S. Department of Labor. These have been adapted by MAVCC.

1. Review with the class the basic math skills (addition, subtraction, multiplication, and division) that will be used in this unit. Skill area: **math**
2. Demonstrate proper weighing and measuring techniques. Allow students to practice these techniques. Skill areas: **math, learning to learn**
3. Provide each student in the class with a complete conversion table.
4. Provide each student with a weight and measure equivalent table for commonly used baking ingredients.
5. Demonstrate procedures for assembling supplies and organizing work.
6. Demonstrate methods of work simplification. Have students discuss how organizing work can benefit the employer and co-workers. Skill area: **learning to learn, oral communication, listening, problem solving, organizational effectiveness**
7. You may want to give the test in parts over a period of time, possibly one week, to allow students time to practice concepts and to understand the information better.

Resources Used in Developing This Unit

1. Grimes, V. and J. Chesser *Food Service: Production and Service*. Stillwater, OK: Mid-America Vocational Curriculum Consortium.
2. Shugart, Grace and Mary Molt. *Food for Fifty*, 8th ed. New York: Macmillan, 1989.
3. West, B., et. al. *Food Service in Institutions*, 5th ed. New York: John Wiley and Sons, 1977.

Suggested Supplemental Resources

1. *Food for Fifty* is an excellent kitchen reference book.
2. FNIA Department, Oklahoma State University. *Food Preparation Manual*, 6th Ed. Dubuque, IA: Kendall Hunt Publishing Co., 1977.
3. *Occupational Food Service Education*. Fennimore, WI: Southwest Wisconsin Vocational Technical Institute, 1975.

**Standard Recipe use
Unit 5**

Answers to Assignment Sheets

Assignment Sheet 1

1. $\frac{1}{2}$ dozen
2. 1 lb.
3. $\frac{1}{2}$ lb.
4. 2 T.
5. 6 oz.
6. 4 oz.
7. 2 t.
8. 1 t.
9. 6 oz.

Assignment Sheet 2

1. $\frac{1}{2}$ gal. + 1 pt.
2. $\frac{1}{2}$ lb.
3. $\frac{1}{4}$ lb.
4. $1\frac{1}{2}$ lb. or 1 lb. 8 oz.
5. 6 oz.
6. 1 pt.
7. 9 lb. 8 oz. or $9\frac{1}{2}$ lb.

Assignment Sheet 3—Evaluated to the satisfaction of the instructor.

Standard Recipe use Unit 5

Answers to Written Test

1. a. 8 e. 6 i. 2 m. 11
 b. 14 f. 13 j. 5 n. 12
 c. 1 g. 15 k. 4 o. 16
 d. 3 h. 9 l. 7 p. 10

2. a. Eliminating guesswork in production
 b. Establishing standards of quality
 c. Establishing consistency of products
 d. Controlling production

3. a. 5 e. 1
 b. 2 f. 3
 c. 8 g. 4
 d. 7 h. 6

4. a. 6 d. 4 g. 3
 b. 9 e. 8 h. 5
 c. 2 f. 1 i. 7

5. a. oz.
 b. lb. or #
 c. t. or tsp.
 d. T. or Tbsp.
 e. C. or c.
 f. pt.
 g. qt.
 h. gal.

6. a. 3 d. 2
 b. 16 e. 4
 c. 2 f. 16

7. a. 3 e. 2 h. 1 k. 4
 b. 4 f. 1 i. 4 l. 3
 c. 3 g. 2 j. 5 m. 2
 d. 5

Answers to Written Test

8. a. Preventing food waste by preventing the preparation of too much or too little of product
b. Controlling quality by preventing guessing and providing consistency to flavor and taste
c. Controlling quantity through portion control and ensuring proper yields
d. Saving time
9. a. Cutting down on cost
b. Increasing food value
c. Making use of surplus food
d. Taking the place of an ingredient that is not on hand
10. a. One
b. Accurate
c. Weights, measures
d. Raw
11. a. 12 t. e. 8 pt. = 4 qt. = 1 gal.
b. 48 T. f. 16 qt. = 4 gal.
c. 32 oz. g. 16 c. = 8 pt. = 4 qt. = 1 gal.
d. 16 qt. h. 24 qt. = 6 gal.
12. a. Required number of servings
b. Multiply
13. b, c, d
14. a. Cart
b. Storeroom
c. Perishable
d. Area
15. Answer should include any two of the following:
a. Collect all needed small equipment.
b. Arrange for the use of large equipment.
c. Schedule use and length of time needed with other departments.
16. b, c, d, e
17. a. Motions
b. Productive
c. Simple
d. Comfortable
e. Efficient
f. Normal
g. Orderly
18. b, c, d

Standard Recipe Use Unit 5

Written Test

Name _____

Score _____

1. Match terms related to standard recipe use with their definitions. Write the correct numbers in the blanks.

- | | |
|--|-------------------------|
| _____ a. Equal in quantity or value | 1. Adjusting |
| _____ b. To make larger | 2. Fluid ounce |
| _____ c. Changing or altering to fit quantity needed | 3. Quality |
| _____ d. The established proper characteristics of the product | 4. Standardized |
| _____ e. "As purchased" amounts by weight or measure | 5. Substitute |
| _____ f. To change from weights to measures or measures to weights | 6. AP |
| _____ g. To obtain a specific amount of food by volume | 7. Recipe |
| _____ h. A quantity less than a whole | 8. Equivalent |
| _____ i. A liquid measure of one ounce | 9. Fraction |
| _____ j. Something used in place of another item | 10. Standardized recipe |
| _____ k. Uniform; something that does not vary | 11. EP |
| _____ l. A list of ingredients and instructions for preparing a certain product | 12. Reduce |
| _____ m. "Edible portion" by weight or measure | 13. Convert |
| _____ n. To lessen in any way, as in size, weight, or amount | 14. Increase |
| _____ o. To determine a specific amount of food by using scales | 15. Measure |
| _____ p. A recipe that has been tested to be of good quality, and if followed exactly, will give the same product every time | 16. Weigh |

Written Test

2. List reasons for using a standardized recipe.

a. _____

b. _____

c. _____

d. _____

3. Match standard recipe headings with their descriptions. Write the correct numbers in the blank.

_____ a.	Foods, spices, and flavorings to be combined to produce a specific product	1. Name
_____ b.	Quantity or amount the recipe will produce	2. Yield
_____ c.	Suggestions for variations in use, method, or ingredients	3. Portion
_____ d.	The step-by-step directions for preparing the recipe	4. Utensils
_____ e.	Product being prepared	5. Ingredients
_____ f.	The number and size of servings	6. Quantity
_____ g.	Tools or instruments needed to produce the recipe	7. Method
_____ h.	The exact amount of ingredients needed	8. Notes

4. Arrange in order general procedures for following a standard recipe. Write a "1" before the first step, a "2" before the second step, and so on.

_____ a. Collect any needed hand tools and utensils, and check to see if other needed equipment will be available.

_____ b. Follow procedure in order as written under "Method."

_____ c. Review the terms and abbreviations.

_____ d. Recheck calculations if necessary

Written Test

5. Write the abbreviations for the following weights and measures used in standard recipes.

- a. Ounce = _____
- b. Pound = _____
- c. Teaspoon = _____
- d. Tablespoon = _____
- e. Cup = _____
- f. Pint = _____
- g. Quart = _____
- h. Gallon = _____

6. Write equivalents of weights and measures used in standard recipes.

- a. 1 T. = _____ t.
- b. 1 c. = _____ t.
- c. 1 pt. = _____ c.
- d. 1 qt. = _____ pt.
- e. 1 gal. = _____ qt.
- f. 1 lb. = _____ oz.

7. Match common can sizes with their equivalents. Write the correct numbers in the blanks. Numbers will be used more than once.

- | | |
|--|------------|
| _____ a. Approximately 3½ cups | 1. No. 303 |
| _____ b. 46 oz. (1 qt., 14 fl. oz.) | 2. No. 2 |
| _____ c. 1 lb., 13 oz. (1 qt., 10 fl. oz.) | 3. No. 2½ |
| _____ d. Approximately 12 cups | 4. No. 3 |
| _____ e. 1 lb., 4 oz. (1 pt., 2 fl. oz.) | 5. No. 10 |

Written Test

- _____ f. Approximately 2 cups
- _____ g. Approximately 2½ cups
- _____ h. 1 lb. (15 fl. oz.)
- _____ i. Approximately 5¾ cups
- _____ j. 6 lb., 9 oz. (3 qt.)
- _____ k. Two of these equal one No. 10
- _____ l. Four of these equal one No. 10
- _____ m. Five of these equal one No. 10

8. List reasons for accurate weighing and measuring.

- a. _____
- b. _____
- c. _____
- d. _____

9. List reasons for substitutions in standard recipes.

- a. _____
- b. _____
- c. _____
- d. _____

10. Complete statements about using conversion tables in adjusting standard recipes. Write the correct numbers in the blanks.

- _____ a. Converts easily from weight to measure or measure to weight when only _____ is given in a recipe
 - 1. unit
 - 2. ingredient
 - 3. method
 - 4. portion

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Written Test

_____ b. Provides _____ for calculations

1. room
2. formulas
3. accuracy
4. equipment

_____ c. Saves _____.

1. ingredients
2. time
3. money
4. utensils

_____ d. Provides _____ weights and measures

1. metric
2. alternate
3. equivalent
4. smallest

_____ e. Gives the _____ weights and measures on raw foods

1. AP or EP
2. PA or PE
3. LB or OZ
4. T or t

11. Convert the following weights and measures.

a. 4 T. = _____ t.

b. 3 c. = _____ T.

c. 2 lb. = _____ oz.

d. 4 gal. = _____ qt.

Increase the following recipe yield from 100 portions to 400 portions and convert to the largest weight or measure.

e. 2 pt. = _____ = _____

f. 4 qt. = _____ = _____

g. 4 c. = _____ = _____ = _____ = _____

h. 6 qt. = _____ = _____

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Written Test

12. Complete the formula for adjusting yield on a standard recipe
- a. Divide the _____ by the original number recipe is for
 - b. _____ each ingredient by the resulting answer
13. Select reasons for checking recipe calculations. Write an "X" in the blank before each correct reason.
- _____ a. Calculation errors created when recipe is photocopied
 - _____ b. Inaccurate recipes that cause overproduction, underproduction, food spoilage
 - _____ c. Calculation errors created when recipe is retyped
 - _____ d. Calculation errors created when recipe is converted
14. Complete guidelines for assembling supplies. Write the correct words in the blanks.
- a. Use a tray or _____.
 - b. Make one trip to the _____ for dry goods.
 - c. Make one trip to the cooler for _____ foods.
 - d. Roll food bins to the _____ of preparation.
15. List two ways to coordinate the use of needed equipment.
- a. _____
 - b. _____
16. Select from a list guidelines for organizing work. Write an "X" in the blank before each correct guideline.
- _____ a. Coordinate the use of needed ingredients.
 - _____ b. Know reasons for and contents of a standard recipe.
 - _____ c. Know and observe safety and sanitation rules.
 - _____ d. Allot time for duties or assignments.
 - _____ e. Follow procedure for assembling supplies.

Written Test

- _____ f. Understand duties or assignments of other departments.
 - _____ g. Rewrite recipe if it was adjusted.
17. Complete statements about work simplification methods. Circle the correct word(s).
- a. Work with rhythmic, smooth flowing (motives, motions).
 - b. Make both hands (productive, proper) at the same time.
 - c. Make hand and body motions few, short, and (simple, single).
 - d. Maintain (constant, comfortable) working positions and conditions.
 - e. Locate materials and equipment for (efficient, inept) sequence of motions.
 - f. Locate activity in (normal, crowded) work area when possible.
 - g. Store materials in an (alphabetical, orderly) and accessible manner.
18. Select from a list guidelines for timing food preparation. Write an "X" in the blank before each guideline.
- _____ a. Prepare foods that require the longest production time last.
 - _____ b. Avoid preparing foods so far in advance that the quality is lost.
 - _____ c. Organize work schedule so that adequate time can be given to each item.
 - _____ d. Complete all foods at time required.

*Permission to duplicate this test is granted.

**Standard Recipe Use
Unit 5**

Unit Evaluation Form

Student Name _____ Unit Rating _____

Assignment Sheet 1—Reduce a Recipe Rating _____

Comments: _____

Assignment Sheet 2—Increase a Recipe Rating _____

Comments: _____

Assignment Sheet 3—Analyze a Work Situation Rating _____

Comments: _____

Written Test Scores

Pretest _____ Posttest _____ Other _____

Other _____

Teacher Signature _____ Date _____

Student Signature _____ Date _____

*Permission to duplicate this form is granted.

Standard Recipe Format

Name: Brownies

Yield: 48 portions

Portion: 2" x 2½" each

Utensils: Mixing bowl, spatula, measuring utensils, baking pan

Ingredients	Quantity	Method
Eggs	12	1. Beat eggs at high speed.
Sugar	2 lb.	2. Add sugar, fat, and vanilla.
Fat, melted	1 lb.	3. Mix at medium speed for 5 minutes.
Vanilla	¼ c.	4. Add combined dry ingredients.
Cake flour	12 oz.	5. Mix at low speed for 5 minutes
Cocoa	8 oz.	6. Add nuts and mix to blend.
Baking powder	4 t.	7. Spread mixture ½-inch thick in pan.
Salt	2 t.	8. Bake in oven at 325°F for 25 to 30 minutes.
Nuts, chopped	12 oz.	
Note: Do no overbake.		

Standard Recipe Use Unit 5

Information Sheet

1. Terms and definitions

- a. **Adjusting** — Changing or altering to fit what is needed
- b. **AP** — "As purchased" amounts by weight or measure
- c. **Convert** — To change from weights to measures or measures to weights
- d. **EP** — "Edible portion" by weight or measure
- e. **Equivalent** — Equal in quantity or value
- f. **Fluid ounce** — A liquid measure of one ounce
- g. **Fraction** — A quantity less than a whole
- h. **Increase** — To make larger
- i. **Measure** — To obtain a specific amount of food by volume
- j. **Quality** — The established proper characteristics of the product
- k. **Recipe** — A list of ingredients and instructions for preparing a certain product
- l. **Reduce** — To lessen in any way, as in size, weight, or amount
- m. **Standardized** — Uniform; something that does not vary
- n. **Standardized recipe** — A recipe that has been tested to be of good quality, and if followed exactly, will give the same product every time
- o. **Substitute** — Something used in place of another item
- p. **Weigh** — To determine a specific amount of food by using scales

2. Reasons for using a standardized recipe

- a. Eliminating guesswork in production
- b. Establishing standards of quality
- c. Establishing consistency of products
- d. Controlling production

Information Sheet

3. Information found on a standard recipe (Transparency 1)

- a. **Name**—Product being prepared
- b. **Yield**—Quantity or amount the recipe will produce
- c. **Portion**—The number and size of servings
- d. **Utensils**—Tools or instruments needed to produce the recipe
- e. **Ingredients**—Foods, spices, and flavorings to be combined to produce a specific product

Note: Ingredients are presented in the form and order in which they will be used.

- f. **Quantity**—The exact amount of ingredients needed, indicated with standard abbreviations
- g. **Method**—The step-by-step directions for preparing the recipe
- h. **Notes**—Suggestions for variations in use, method, or ingredients

4. Procedure to follow when using a standard recipe

- a. Read the recipe through once carefully.
- b. Review terms and abbreviations.

Note: If any terms or abbreviations are unfamiliar, find their meanings before you go on.

- c. Check the amount the recipe yields.

Note: If the recipe makes the desired yield, then proceed. If the recipe does not make the desired yield, increase or decrease the recipe as needed.

- d. Recheck calculations if necessary.
- e. Assemble all ingredients.

Note: This is necessary to ensure that all ingredients are available and to ensure that you have the required amounts.

- f. Collect needed hand tools and utensils, and check to see if other needed equipment will be available.

Note: If the oven requires preheating, turn it on and set the temperature 10 minutes before needed.

Information Sheet

- g. Check the time required for preparation, and plan so that the product will be finished at the proper time.
- h. Weigh or measure each ingredient listed in the recipe before proceeding.
- i. Follow the procedure in order as written under "Method."

5. Abbreviations for weights and measures used in standard recipes

- a. Ounce — oz.
- b. Pound — lb. or #
- c. Teaspoon — t. or tsp.
- d. Tablespoon — T. or Tbsp.
- e. Cup — C. or c.
- f. Pint — pt.
- g. Quart — qt.
- h. Gallon — gal.

6. Equivalents of weights and measures used in standard recipes

- a. 1 T. = 3 t.
- b. 1 c. = 16 T.
- c. 1 pt. = 2 c.
- d. 1 qt. = 2 pt.
- e. 1 gal. = 4 qt.
- f. 1 lb. = 16 oz.

Note: There are 8 fluid ounces in 1 cup. This should not be confused with 16 ounces per pound. Conversion tables are used to change weights to measures or measures to weights.

Examples: 8 fluid oz. of water = 1 c. water
 16 fluid oz. of tea = 2 c. tea
 16 weighted oz. of flour = 4 c. flour
 One lb. dry bread crumbs = 4 c. dry bread crumbs
 One lb. brown sugar does not = 4 c. brown sugar

Information Sheet

7. Common can sizes and their equivalents (Figure 1)

 No. 303	 Approximately 2 cups 1 lb. (15 fl. oz.)
 No. 2	 Approximately 2½ cups 1 lb. 4 oz. (1 pt. 2 fl. oz.) Five No. 2 cans equal one No. 10 can
 No. 2½	 Approximately 3½ cups 1 lb. 13 oz. (1 qt. 10 fl. oz.) Four No. 2½ cans equal one No. 10 can
 No. 3	 Approximately 5¾ cups 46 oz. (1 qt. 14 fl. oz.) Two No. 3 cans equal one No. 10 can
 No. 10	 Approximately 12 cups 6 lb. 9 oz. (3 qt.)

8. Reasons for accurate weighing and measuring

Note: If the recipe yield is for fifty 3-ounce portions, the food items in the recipe must be correctly weighed and measured and the food correctly prepared or the yield will not be fifty 3-ounce portions.

- Preventing food waste by preventing the preparation of too much or too little of a product
- Controlling quality by preventing guessing and providing consistency to flavor and taste

Information Sheet

- c. Controlling quantity through portion control and ensuring proper yield.
- d. Saving time

9. Reasons for substitutions in standard recipes

- a. Cutting down on cost
- b. Increasing food value
- c. Making use of surplus food
- d. Taking the place of an ingredient that is not on hand

10. Use of conversion tables in adjusting standard recipes

Note: A complete conversion table of food weights and measures should be available in the kitchen for daily use.

- a. Converts easily from weight to measure or measure to weight when only one unit is given in a recipe
- b. Provides accuracy for calculations
- c. Saves time
- d. Provides equivalent weights and measures
- e. Gives AP or EP weights and measures on raw foods

11. Converting weights and measures

- a. Multiply both sides of the equation for the desired weight or measure.

Examples: 1 oz. of ingredient = 2 T.

Recipe calls for 3 ounces:

$$\begin{aligned} 1 \text{ oz.} &= 2 \text{ T.} \\ 3 \times 1 \text{ oz.} &= 3 \times 2 \text{ T.} \\ 3 \text{ oz.} &= 6 \text{ T.} \end{aligned}$$

Recipe calls for 8 T.:

$$\begin{aligned} 1 \text{ oz.} &= 2 \text{ T.} \\ 4 \times 1 \text{ oz.} &= 4 \times 2 \text{ T.} \\ 4 \text{ oz.} &= 8 \text{ T.} \end{aligned}$$

Recipe calls for 1 T.:

$$\begin{aligned} 1 \text{ oz.} &= 2 \text{ T.} \\ \frac{1}{2} \times 1 \text{ oz.} &= \frac{1}{2} \times 2 \text{ T.} \\ \frac{1}{2} \text{ oz.} &= 1 \text{ T.} \end{aligned}$$

Information Sheet

- b. Convert measures or weights to the largest measure or weight possible.

Example: Recipe increased from 100 portions to 300 portions.

$$2 \text{ c.} \times 3 = 6 \text{ c.} = 3 \text{ pt.} = 1 \text{ qt.} 1 \text{ pt.}$$

$$2 \text{ pt.} \times 3 = 6 \text{ pt.} = 3 \text{ qt.}$$

$$4 \text{ qt.} \times 3 = 12 \text{ qt.} = 3 \text{ gal.}$$

$$12 \text{ oz.} \times 3 = 36 \text{ oz.} = 2 \text{ lb.} 4 \text{ oz. or } 2\frac{1}{4} \text{ lb.}$$

12. Formula for adjusting yield on a standard recipe

- Divide the required number of servings by the original number recipe is for.
- Multiply each ingredient by the resulting answer.

Note: This is often referred to as the New-Over-Old method.

Example 1: To adjust a recipe from 50 servings to 25

$$\frac{\text{Required Number}}{\text{Number Recipe is For}} = \frac{25}{50} = \frac{1}{2} \times \text{Each Ingredient}$$

Example 2: To adjust a recipe from 100 servings to 300

$$\frac{\text{Required Number}}{\text{Number Recipe is For}} = \frac{300}{100} = 3 \times \text{Each Ingredient}$$

13. Reasons for checking recipe calculations

- Calculation errors created when recipe is:

- Reduced
- Enlarged
- Retyped
- Converted

Examples: 24 oz. should be changed to 1 lb. 8 oz.

$\frac{1}{4}$ lb. should be changed to 4 oz.

$\frac{1}{4}$ gal. should be changed to 1 qt.

8 qt. should be changed to 2 gal.

- Inaccurate recipes that cause:

- Overproduction
- Underproduction
- Food spoilage

Information Sheet

14. Guidelines for assembling supplies

- a. Use a tray or cart.
- b. Make one trip to the storeroom for dry goods.
- c. Make one trip to the cooler for perishable foods.
- d. Roll food bins or containers to the area of preparation.

Note: Always use opened containers first.

Examples: Flour, sugar, meal, powdered milk

15. Ways to coordinate the use of needed equipment

- a. Collect all needed small equipment.
- b. Arrange for the use of large equipment.
- c. Schedule use and length of time needed with other departments.

Note: Searching for equipment during preparation disrupts the work flow and increases the likelihood of error and time loss.

16. Guidelines for organizing work

- a. Know and observe safety and sanitation rules.
- b. Understand duties or assignments.
- c. Know reasons for and contents of a standard recipe.
- d. Check recipe calculations if the recipe was adjusted.
- e. Follow procedures for assembling supplies.
- f. Coordinate use of needed equipment.
- g. Allot time for required duties or assignments.

Information Sheet**17. Methods of work simplification**

- a. Make rhythmic and smooth flowing motions.
- b. Make both hands productive at the same time.
- c. Make hand and body motions few, short, and simple.
- d. Maintain comfortable working positions and conditions.
- e. Locate materials and equipment for an efficient sequence of motions.
- f. Locate activity in usual work area when possible.
- g. Store materials in an orderly and accessible manner.

18. Guidelines for timing food preparation

- a. Prepare foods first that require the longest production time.
- b. Avoid preparing foods so far in advance that the quality is lost.
- c. Organize work schedule so that adequate time can be given to each item.
- d. Complete all foods at time required.

Standard Recipe Use Unit 5

Student Supplement 1—Identify Standard Recipe Headings

Name _____

Directions: Following is a list of words that are headings for various recipe contents. Using the recipe below, identify the headings of a standard recipe by placing the letter designated on the recipe next to the appropriate heading. Check your answers with those on the back of this page.

- | | |
|----------------------|-------------------|
| _____ 1. Method | _____ 5. Note |
| _____ 2. Yield | _____ 6. Quantity |
| _____ 3. Portion | _____ 7. Utensils |
| _____ 4. Ingredients | _____ 8. Name |

- a.** Brownies
b. 48 portions **c.** 2" x 2½" each
d. Mixing bowl, spatula, measuring utensils, baking pan

e.	f.	g.
Eggs Sugar Fat, melted Vanilla Cake flour Cocoa Baking powder Salt Nuts, chopped	12 2 lb. 1 lb. ¼ c. 12 oz. 8 oz. 4 t. 2 t. 12 oz.	1. Beat eggs at high speed. 2. Add sugar, fat, and vanilla. 3. Mix at medium speed for 5 minutes. 4. Add combined dry ingredients. 5. Mix at low speed for 5 minutes 6. Add nuts and mix to blend. 7. Spread mixture ½-inch thick in pan. 8. Bake in oven at 325°F for 25 to 30 minutes.
h. Do not overbake.		

Student Supplement 1

Answers

1. g
2. b
3. c
4. e
5. h
6. f
7. d
8. a

Standard Recipe Use Unit 5

Student Supplement 2—Convert Weights and Measures Using a Conversion Table

Name _____

Directions: Using the information in the following conversion table, complete the information below. Convert answers to the largest practical weight or measure. Check your answers with those on the back of this page.

Conversion Table		
Food Item	Weight	Measure
Baking soda	6 oz.	1 cup
Cornmeal	1 lb. 5 oz.	1 quart
Milk	2 lb.	1 pint
Shortening	8 oz.	1 pint
Rolled oats	3 oz.	1 cup
Crushed Pineapple	10½ oz.	1 pint
Water	1 lb.	1 pint

1. Convert the following weights to measures.

- a. 2 lb. 10 oz. of cornmeal = _____
- b. 32 oz. of shortening = _____
- c. 12 oz. of rolled oats = _____

2. Convert the following measures to weights.

- a. 3 cups of baking soda = _____
- b. 1½ pints of milk = _____
- c. 3 pints of crushed pineapple = _____
- d. 1 quart of water = _____

Student Supplement 2

Answers

1.
 - a. $\frac{1}{2}$ gal.
 - b. 2 qt.
 - c. 2 pt.
2.
 - a. 1 lb., 2 oz.
 - b. 1 lb., 8 oz.
 - c. 1 lb., $15\frac{1}{2}$ oz.
 - d. 2 lb.

Standard Recipe Use Unit 5

Assignment Sheet 1—Reduce a Recipe

Name _____ Overall Rating _____

Evaluation criteria	Rating
Correct answers given	_____
Answers correctly converted to largest practical weight or measure	_____

Directions: The following recipe ingredients yield forty-eight $2 \times 2\frac{1}{2}$ -inch portions. Reduce the recipe to yield twenty-four $2 \times 2\frac{1}{2}$ -inch portions. Convert your answers to the largest practical weight or measure. The above criteria will be used to evaluate your performance.

Brownies

Ingredient	Amount for 48 portions	Amount for 24 portions
Eggs	12	1. _____
Sugar	2 lb.	2. _____
Shortening, melted	1 lb.	3. _____
Vanilla	$\frac{1}{4}$ c.	4. _____
Cake flour	12 oz.	5. _____
Cocoa	8 oz.	6. _____
Baking powder	4 t.	7. _____
Salt	2 t.	8. _____
Nuts, chopped	12 oz.	9. _____

Standard Recipe Use Unit 5

Assignment Sheet 2—Increase a Recipe

Name _____ Overall Rating _____

Evaluation criteria	Rating
Correct answers given	_____
Answers correctly converted to largest practical weight or measure	_____

Directions: The following recipe ingredients yield 100 rolls. Increase the recipe to yield 200 rolls. Convert answers to the largest practical weight or measure. The above criteria will be used to evaluate your performance.

Plain Rolls

Ingredients	Yield: 100 Rolls	Yield: 200 Rolls
Milk	1¼ qt.	1. _____
Sugar	4 oz.	2. _____
Salt	2 oz.	3. _____
Fat	12 oz.	4. _____
Yeast, compressed	3 oz.	5. _____
Water, lukewarm	1 cup	6. _____
Flour	4 lb. 12 oz.	7. _____

Standard Recipe Use Unit 5

Assignment Sheet 3—Analyze a Work Situation

Name _____ Overall Rating _____

Evaluation criteria	Rating
Accuracy of observations	_____
Validity of time-saving methods	_____
Participation in class discussion	_____

Directions: Observe a fellow student preparing a recipe. List the pieces of equipment used and the food items required. Observe the arrangement for work. List any interruptions to get supplies or equipment and the amount of time spent. Answer the questions that follow and be prepared to discuss your answers in class. The above criteria will be used to evaluate your performance.

Equipment

Food Items

Cause of Interruption

Time Spent

Assignment Sheet 3

- Could time have been saved in the preparation of this recipe? _____
- If so, what are specific measures that could have been followed to avoid wasting time?

Cookies

Unit 6

Objective Sheet

Unit Objective

After completing this unit, the student should be able to prepare and evaluate a variety of cookies. The student should demonstrate these competencies by completing the job sheets and scoring minimum of 85 percent on the written test.

Specific Objectives

After completing this unit, the student should be able to:

1. Match terms related to cookies with their definitions.
2. Distinguish between one-stage and creaming mixing methods.
3. Distinguish among characteristics of soft, stiff, and very stiff cookies.
4. Match panning procedures with basic types of cookie makeups.
5. State guidelines for the proper care of cookie baking pans.
6. Complete statements about factors affecting the baking and cooling of cookies.
7. Match cookie quality standards with their descriptions.
8. Match common cookie problems with their causes.
9. Complete guidelines about coloring, icing, and garnishing cookies.
10. Complete guidelines for cookie storage.
11. List types of convenience cookie products.
12. Prepare and evaluate chocolate chip cookies. (Job Sheet 1)
13. Prepare and evaluate brownies. (Job Sheet 2)
14. Prepare and evaluate chocolate icebox cookies. (Job Sheet 3)
15. Prepare and evaluate sugar cookies. (Job Sheet 4)
16. Prepare and evaluate butterscotch icebox cookies. (Job Sheet 5)

Objective Sheet

17. Prepare and evaluate vanilla wafers. (Job Sheet 6)
18. Prepare and evaluate yellow icebox cookies. (Job Sheet 7)
19. Prepare and evaluate pinwheel cookies. (Job Sheet 8)
20. Use a pastry bag to bag out wafer cookies. (Job Sheet 9)

Cookies Unit 6

Suggested Activities

Instructional Plan

1. Read the unit carefully and plan for instruction. Study the specific objectives to determine the order in which you will present them.
2. Review the teaching suggestions below, and plan classroom activities. Integrate workplace skills as they apply to your vocational program.
3. Plan your presentation to take advantage of student learning styles and to accommodate special needs students
4. Obtain materials to supplement instruction of this unit. See ordering information in the "Suggested Supplemental Resources" section.
5. Review instructions for evaluating student outcomes/performance and make copies of the Unit Evaluation Form.
6. Provide students with unit of instruction.
7. Discuss unit and specific objectives.
8. Discuss and demonstrate the job sheet techniques, and review the evaluation criteria for each. Schedule performance dates.
9. Discuss the use of the Unit Evaluation Form with the students, and select and discuss the rating scale that will be used for student evaluation.
10. Give written test.
11. Compile job sheet ratings and written test scores on the Unit Evaluation Form.
12. Reteach and retest as required.

Suggested Activities

Teaching Suggestions

Note: Skill areas appearing in boldface type in the Teaching Suggestions refer to the academic and workplace skills identified by the American Society for Training and Development (ASTD) and the U.S. Department of Labor. These have been adapted by MAVCC.

1. Discuss work simplification principles related to cookie making. Skill area: **listening**.
2. Show students the differences among soft, stiff, and very stiff cookie doughs.
3. Demonstrate methods of mixing cookies. Allow students to practice these methods. Skill area: **learning to learn**.
4. Demonstrate methods of cutting and panning cookies. Allow students to practice these methods. Skill area: **learning to learn**.
5. Show the filmstrip, *Cookies*. Skill area: **listening**.
6. Demonstrate the various techniques for decorating and icing cookies. Allow students to practice these techniques. Skill area: **learning to learn**.

Resources Used in Developing This Unit

1. Armendola, Joseph. *The Baker's Manual for Quantity Baking and Pastry Making*, 3rd ed. Jenks, OK: Williams Book Company.
2. *Baking Handbook for the School and Food Service Program*. Minneapolis, MN: General Mills, Inc.
3. Shugart, Grace and Mary Molt. *Food for Fifty*, 8th ed. New York: Macmillan, 1989.

Suggested Supplemental Resource—Order *Cookie* filmstrip and catalog listing other materials pertinent to cookie baking from:

Prentice-Hall Media
ServCode BF
150 White Plains Road
Tarrytown, NY 10591

Suggested Activities

Instructions For Evaluating Student Performance

When the student is ready to perform a specific task, obtain a copy of the job sheet which may be found in either the teacher or student edition. Then observe the student performing the procedure.

Process evaluation—Place a mark in the box to the left of each designated checkpoint if the student has satisfactorily achieved the step(s) for each checkpoint area. If the student is unable to correctly complete the procedure, have the student review the materials and try again.

Product evaluation—Once the student has satisfactorily completed the procedure, rate the student product (outcome) using the criteria which have been provided as part of the job sheet. If the student's product is unacceptable, have the student review the materials and submit another product for evaluation.

Sample performance evaluation keys have been provided below. Many other keys are available. Select one rating (grading scale) which best fits your program needs.

Option A

- 4 - Skilled—Can perform job with no additional training.
- 3 - Moderately skilled—Has performed job during training program; limited additional training may be required.
- 2 - Limited skill—Has performed job during training program; additional training is required to develop skill.
- 1 - Unskilled—Is familiar with process, but is unable to perform job.

Option B

- Yes—Can perform job with no additional training.
- No—Is unable to perform job satisfactorily.

Cookies
Unit 6

Answers to Written Test

- | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|
| 1. | a. | 2 | f. | 21 | k. | 22 | p. | 5 | u. | 14 |
| | b. | 1 | g. | 10 | l. | 13 | q. | 23 | v. | 15 |
| | c. | 7 | h. | 11 | m. | 4 | r. | 25 | w. | 9 |
| | d. | 19 | i. | 3 | n. | 20 | s. | 24 | x. | 18 |
| | e. | 12 | j. | 8 | o. | 16 | t. | 6 | y. | 17 |
2. a
- | | | | | |
|----|----|----|----|----|
| 3. | a. | VS | f. | SF |
| | b. | SF | g. | ST |
| | c. | SF | h. | ST |
| | d. | SF | i. | ST |
| | e. | ST | j. | VS |
- | | | | | |
|----|----|---|----|---|
| 4. | a. | 3 | d. | 5 |
| | b. | 4 | e. | 1 |
| | c. | 6 | f. | 2 |
5. a. Clean pans and air dry thoroughly after use.
b. Allow pans to cool between each batch of cookies.
6. a. Most important
b. Second most important
c. Do not
d. Soft
e. High; chocolate
f. While still warm; cooling racks
g. At room temperature
- | | | |
|----|----|---|
| 7. | a. | 3 |
| | b. | 1 |
| | c. | 5 |
| | d. | 4 |
| | e. | 2 |
- | | | |
|----|----|---|
| 8. | a. | 1 |
| | b. | 3 |
| | c. | 4 |
| | d. | 2 |

Answers to Written Test

9. a. 2 e. 4
 b. 3 f. 2
 c. 1 g. 3
 d. 4 h. 2
10. a. Most
 b. Stiff
 c. Soft
 d. Apple
 e. Stacked
 f. Foam
11. Answers should include any two of the following:
- a. Packaged mixes
 b. Refrigerated or frozen doughs
 c. Frozen, prebaked cookies

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Cookies
Unit 6

Written Test

Name _____

Score _____

1. Match terms related to cookies with their definitions. Write the correct numbers in the blanks.

- | | | |
|----------|--|----------------|
| _____ a. | To drop stiff dough by a spoon or disher | 1. Scaling |
| _____ b. | Weighing ingredients or doughs with a scale | 2. Drop |
| _____ c. | To handle with pressing, folding, and stretching motion | 3. Tough |
| _____ d. | Special types of paper used to line a baking pan | 4. Disher |
| _____ e. | Excessive blending of ingredients that may result in a tough cookie product | 5. Pastry bag |
| _____ f. | Containing some liquid or moisture; not dry | 6. Sift |
| _____ g. | To flatten a dough with a rolling pin | 7. Knead |
| _____ h. | The character of the internal cell structure of the product | 8. Stamper |
| _____ i. | Firm in texture; not easily chewed | 9. Bar |
| _____ j. | Utensil used to shape cookies by flattening them | 10. Roll |
| _____ k. | Type of cookie for which very stiff dough is shaped, refrigerated, cut to desired proportions, and baked | 11. Texture |
| _____ l. | To press a soft dough through a pastry bag and tube, producing a particular shape or design | 12. Overmixing |
| | | 13. Bag out |
| | | 14. Scrape |
| | | 15. Dust |
| | | 16. Pinwheel |

Written Test

- | | | |
|---------|--|---------------|
| _____m. | Utensil used to evenly portion drop cookie doughs by size and weight | 17. Tubing |
| _____n. | To fold or mix two or more ingredients together, fairly gently, until smooth | 18. Dough |
| _____o. | Type of icebox cookie made from two or more colors of dough that have been layered and rolled | 19. Parchment |
| _____p. | Utensil used to bag out soft dough cookies | 20. Blend |
| _____q. | To work one or more ingredients together until soft and blended | 21. Moist |
| _____r. | Method in which dough is placed on or in pan | 22. Icebox |
| _____s. | To brush a liquid, such as eggs or milk, over the top of a product before it is baked | 23. Cream |
| _____t. | To pass a dry ingredient or a mixture of dry ingredients through a sieve or sifter to blend the mixture and remove lumps | 24. Wash |
| _____u. | To remove clinging dough from the sides and bottom of a mixing bowl or other container | 25. Make-up |
| _____v. | To lightly cover with flour to prevent sticking | |
| _____w. | Cookies that are shaped, or cut to size, after they have been baked | |
| _____x. | Mixture of ingredients that is thick enough to hold its shape when dropped from a spoon as in drop cookies | |
| _____y. | Passing soft dough or other mixtures through a pastry bag tube for shaping or decorative purpose | |

Written Test

2. Distinguish between one-stage and creaming mixing methods. Write a "1" in the blank before the one-stage method.
- _____ a. Place all ingredients in a mixing bowl, and mix for 2 or 3 minutes until smoothly blended.
 - _____ b. Place sugar, shortening or butter, salt, and spices in a mixing bowl and eggs and liquid; add the flour and leavening agent last.
3. Distinguish among the characteristics of soft, stiff, and very stiff cookie doughs. Write "SF" for soft, "ST" for stiff and "VS" for very stiff.
- _____ a. Very low moisture content
 - _____ b. High proportion of eggs
 - _____ c. Soft, moist finished product
 - _____ d. Usually prepared in advance, refrigerated, and baked as product is desired
 - _____ e. Less liquid and fewer eggs than used in other doughs
 - _____ f. High moisture content
 - _____ g. Crisp finished product
 - _____ h. Higher proportion of flour than soft dough
 - _____ i. Medium-low moisture content
 - _____ j. Crisp final product
4. Match panning procedures with types of cookies makeups. Write the correct numbers in the blanks.
- | | |
|--|------------|
| _____ a. Mixture dropped onto sheet pans with a spoon or disher and pressed or flattened out with a weight or special cookie die | 1. Rolled |
| | 2. Bar |
| | 3. Dropped |
| _____ b. Cookie mixture spread onto sheet pans and washed, or sprinkled with nuts | 4. Sheet |

Written Test

- _____ c. Dough scaled to 1 pound 8 ounces, rolled into 18-inch bars; wrapped in waxed paper, placed on sheet pans, refrigerated overnight, and then sliced and placed on baking sheets
 - _____ d. Mixture placed in pastry bag having desired size and shape tube and pressed directly onto sheet pans
 - _____ e. Dough rolled on a pastry cloth to $\frac{1}{8}$ -inch thickness, cut in desired shape and size with a cookie cutter, and placed on baking sheets
 - _____ f. Dough scaled into 1-pound pieces, rolled out to length of sheet pan (three strips per sheet pan, with a space between each strip), flattened with fingers, and shaped into uniform 1-inch strips
5. State guidelines for the proper care of cookie baking pans.
- a. _____
 - b. _____
6. Complete statements about factors affecting the baking and cooling of cookies. Circle the correct word(s).
- a. Proper temperature is the (most important, second most important) baking factor.
 - b. The length of time cookies are in the oven is the (most important, second most important) baking factor.
 - c. Cookies should be panned so that they (do, do not) touch the pan rim of other cookies.
 - d. Cookies should have a (soft, crisp) consistency when removed from the oven.
 - e. Cookies with a (low, high) sugar content and (chocolate, vanilla) cookies scorch easily.
 - f. Cookies should be removed from baking pans (while still warm, after they have cooled) and placed on (cooling racks, waxed paper).
 - g. Cookies should be allowed to cool (in the refrigerator, at room temperature) out of air currents.
5. Spritz or bagged
6. Icebox or refrigerator

Written Test

7. Match cookie quality standards with their descriptions. Write the correct numbers in the blanks.

_____ a.	Even cells, free of tunnels	1. Appearance
_____ b.	Regular even shape; not scorched, cracked, or crumbly	2. Flavor
_____ c.	Uniform; appropriate for cookie type	3. Internal structure
_____ d.	Crisp, tender thin cookies; chewy, tender drop cookies	4. Texture
_____ e.	Well-blended ingredients free of excessive seasoning	5. Color

8. Match common cookie problems with their causes. Write the correct numbers in the blanks.

_____ a.	Sugar ground too fine; dough overmixed; oven temperature too high	1. Not enough spread
_____ b.	Too much flour; dough overbaked	2. Tough
_____ c.	Too much sugar; dough too soft; too much grease on baking sheet; excessive creaming	3. Hard and dry
_____ d.	Dough overmixed; flour too strong in gluten; not enough fat	4. Too much spread

9. Complete statements about coloring, icing, and garnishing cookies. Write the correct numbers in the blanks.

_____ a.	Cookie colors should be consistent with their ____.
	1. texture
	2. flavor
	3. structure
	4. appearance
_____ b.	Cookies should be ____ before being dipped or iced.
	1. washed
	2. chilled
	3. cooled
	4. warmed

Written Test

_____ c. _____ doughs should be avoided because they have a tendency to affect flavor.

1. Deep or bright-colored
2. Flavored
3. Textured
4. Fruit- or nut-filled

_____ d. Icings should be _____ enough to prevent running.

1. chilled
2. flavored
3. beaten
4. thick

_____ e. _____ icings are the most frequently used cookie icing.

1. Vanilla
2. Strawberry
3. Lemon
4. Chocolate

_____ f. Icings should have a _____.

1. soft exterior and interior
2. firm exterior and a soft interior
3. soft exterior and a firm interior
4. firm interior and exterior

_____ g. _____ are the most frequently used cookie garnishes.

1. Fruit
2. Candy sprinkles
3. Nuts
4. Chocolate chips

_____ h. _____ fruits and nuts used as garnishes give a more uniform and attractive appearance

1. Finely ground
2. Whole or half pieces of
3. Quartered pieces of
4. Coarsely ground

Written Test

10. Complete guidelines for cookie storage. Circle the correct word(s).
- a. (Few, Most) cookie doughs freeze well and may be thawed and baked as needed.
 - b. (Soft, Stiff) doughs should be thawed under refrigeration.
 - c. (Soft, Stiff) doughs may be thawed at room temperature.
 - d. A freshly cut (orange, apple) stored with soft cookies will keep cookies moist.
 - e. Soft cookies should not be (stored, stacked).
 - f. (Sugar, Foam) cookies dry out easily, so they should be made in small batches, used quickly, and stored in air-tight containers.
 - g. Pack cookies only after (cooling, 24 hours).
11. List two types of convenience cookie products.
- a. _____
 - b. _____

*Permission to duplicate this test is granted.

Cookies
Unit 6

Unit Evaluation Form

Student Name _____ Unit Rating _____

Job Sheet 1—Prepare and Evaluate Chocolate Chip Cookies Rating _____

Comments: _____

Job Sheet 2—Prepare and Evaluate Brownies Rating _____

Comments: _____

Job Sheet 3—Prepare and Evaluate Chocolate Icebox Cookies Rating _____

Comments: _____

Job Sheet 4—Prepare and Evaluate Sugar Cookies Rating _____

Comments: _____

Job Sheet 5—Prepare and Evaluate Butterscotch Icebox Cookies Rating _____

Comments: _____

Job Sheet 6—Prepare and Evaluate Vanilla Wafers Rating _____

Comments: _____

Job Sheet 7—Prepare and Evaluate Yellow Icebox Cookies Rating _____

Comments: _____

Job Sheet 8—Prepare and Evaluate Pinwheel Cookies Rating _____

Comments: _____

Unit Evaluation Form

Job Sheet 9—Use a Pastry Bag to Bag Out Wafer Cookies

Rating _____

Comments: _____

Written Test Scores

Pretest _____

Posttest _____

Other _____

Other _____

Teacher Signature _____

Date _____

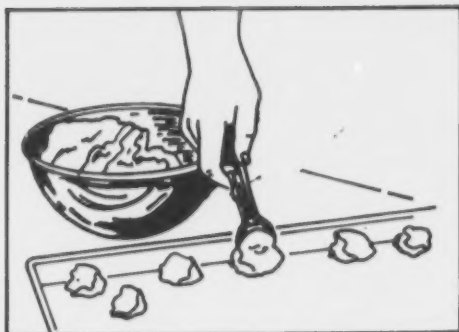
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Date _____

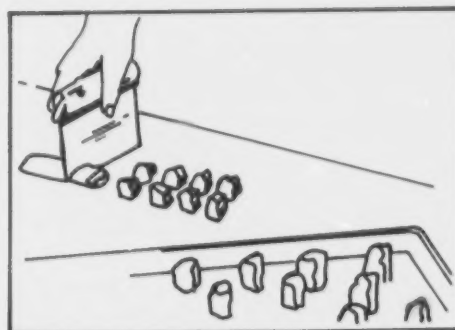
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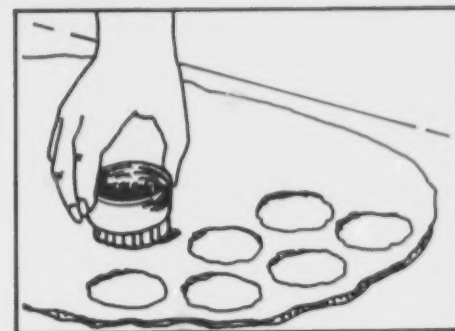
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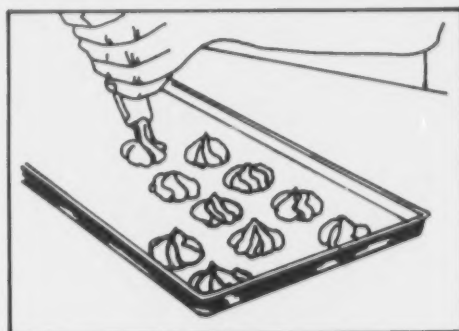
Dropped



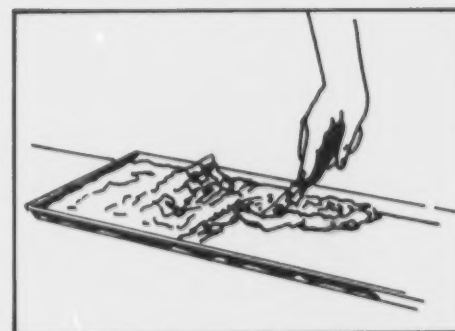
Ice Box or Refrigerator



Rolled



Spritz or Bagged



Bar or Sheet

Cookies Unit 6

Information Sheet

1. Terms and definitions

- a. **Bag out** — To press a soft dough through a pastry bag and tube, producing a particular shape or design
- b. **Blend** — To fold or mix two or more ingredients together, fairly gently, until smooth
- c. **Bar** — Cookies that are shaped, or cut to size, after they have been baked
- d. **Cream** — To work one or more ingredients together until soft and blended
- e. **Disher** — Utensil used to evenly portion drop cookie doughs by size and weight
- f. **Dough** — Mixture of ingredients that is thick enough to hold its shape when dropped from a spoon as in drop cookies
- g. **Drop** — To drop stiff dough by a spoon or disher
- h. **Dust** — To lightly cover with flour to prevent sticking
- i. **Icebox** — Type of cookie for which very stiff dough is shaped, refrigerated, cut to desired proportions, and baked
- j. **Knead** — To handle with pressing, folding, and stretching motion
- k. **Make-up** — To form or shape as in molding a roll of cookie dough
- l. **Moist** — Containing some liquid or moisture; not dry

Note: Baked products should be moist so that they will stay fresh longer.
- m. **Overmixing** — Excessive blending of ingredients that may result in a tough cookie product
- n. **Panning** — Method in which dough is placed on or in pan
- o. **Parchment** — Special types of paper used to line a baking pan
- p. **Pastry bag** — Utensil used to bag out soft dough cookies
- q. **Pinwheel** — Type of icebox cookie made from two or more colors of dough that have been layered and rolled

Information Sheet

- r. **Roll** — To flatten a dough with a rolling pin
- s. **Scaling** — Weighing ingredients or doughs with a scale
- t. **Scrape** — To remove clinging dough from the sides and bottom of a mixing bowl or other container
- u. **Sift** — To pass a dry ingredient or a mixture of dry ingredients through a sieve or sifter to blend the mixture and remove lumps
- v. **Stamper** — Utensil used to shape cookies by flattening them
- w. **Texture** — The character of the internal cell structure of the product
- x. **Tough** — Firm in texture; not easily chewed
- y. **Tubing** — Passing soft dough or other mixtures through a pastry bag tube for shaping or decorative purpose
- z. **Wash** — To brush a liquid, such as eggs or milk, over the top of a product before it is baked

2. Cookie mixing methods

- a. **One-stage method** — Place all ingredients in a mixing bowl, and mix for 2 or 3 minutes until smoothly blended.
- b. **Creaming method** — Place sugar, shortening or butter, salt, and spices in a mixing bowl and blend together before adding the eggs and liquid; add the flour and leavening agent last.

3. Characteristics of types of cookie doughs

- a. Soft dough
 - High moisture content
 - High proportion of eggs
 - Soft, moist finished product

Examples: Drop cookies, brownies

Information Sheet

b. Stiff dough

- Higher proportion of flour than soft dough
- Less liquid and fewer eggs than used in other doughs
- Medium-low moisture content
- Crisp finished product

Examples: Bars, snaps, shortbreads

c. Very stiff dough

Note: This type of dough is used for icebox cookies.

- Very low moisture content
- Usually prepared in advance, refrigerated, and baked as product is desired
- Crisp final product

4. **Panning procedure for basic types of cookie makeups** (Transparency 1)

- a. **Rolled** — Dough rolled on a pastry cloth to $\frac{1}{8}$ -inch thickness, cut in desired shape and size with a cookie cutter, and placed on baking sheets

Note: Rolled dough is easier to handle if chilled first.

- b. **Icebox or refrigerator** — Dough scaled to 1 pound 8 ounces, rolled into 18-inch bars; wrapped in waxed paper, placed on sheet pans, refrigerated overnight, and then sliced and placed on baking sheets

- c. **Spritz or bagged** — Mixture placed in pastry bag having desired size and shape tube and pressed directly onto sheet pans

- d. **Bar** — Dough scaled into 1-pound pieces, rolled out to length of sheet pan (three strips per sheet pan, with a space between each strip), flattened with fingers, and shaped into uniform 1-inch strips

Information Sheet

- e. **Sheet** — Cookie mixture spread onto sheet pans and washed, or sprinkled with nuts

Note: After baking, the sheet of baked cookie mixture is cooled and cut into squares or oblongs.

- f. **Dropped** — Mixture dropped onto sheet pans with a spoon or disher and pressed or flattened out with a weight or special cookie die

Note: If the dough is rich, it will spread by itself; do not press or flatten.

5. Guidelines for proper care of cookie baking pans

Note: Poor care of baking pans or lack of preparation causes sticking and uneven baking.

- a. Clean pans and air dry thoroughly after use.
b. Allow pans to cool between each batch of cookies.

Note: If pans become dented, the cookies will bake unevenly.

6. Factors affecting baking and cooling of cookies

- a. **Temperature** — Proper temperature is the most important baking factor.

Note: Oven temperature should be calibrated frequently.

- b. **Baking time** — The length of time cookies are in the oven is the second most important baking factor.

- c. **Panning** — Cookies should be panned so that they do not touch the pan rim or other cookies.

- d. **Finished product consistency** — Cookies should still be somewhat soft when removed from the oven.

Note: Due to their thinness, cookies will continue to cook slightly after they have been removed from the oven.

- e. **Sugar content** — Cookies with a high sugar content and chocolate cookies scorch easily.

- f. **Cooling**

- Cookies should be removed from baking pans while still warm and placed on cooling racks.
- Cookies should be allowed to cool at room temperature out of air currents.

Note: Too rapid cooling will cause cookies to crack and split.

Information Sheet

7. Cookie quality standards

- a. **Appearance** — Regular even shape; not scorched, cracked, or crumbly
- b. **Flavor** — Well-blended ingredients free of excessive seasoning
- c. **Internal structure** — Even cells, free of tunnels

Note: A tunnel is an empty space in the baked cookie caused by improper mixing.

- d. **Texture** — Crisp, tender thin cookies; chewy, tender drop cookies
- e. **Color** — Uniform; appropriate for cookie type

8. Common cookies problems and their causes

Note: One or two cookies should be baked first to test the dough.

- a. Too much spread
 - Too much sugar
 - Dough too soft
 - Too much grease on baking sheet
 - Excessive creaming
- b. Not enough spread
 - Sugar ground too fine
 - Dough overmixed
 - Oven temperature too high
- c. Tough
 - Dough overmixed
 - Flour too strong in gluten
 - Not enough fat
- d. Hard and dry
 - Too much flour
 - Dough overbaked

Information Sheet

9. Coloring, icing, and garnishing cookies

- a. Cookie colors should be consistent with their flavor.
Example: A yellow cookie should not have a cherry flavor.
- b. Cookies should be cooled before being dipped or iced.
- c. Deep or bright-colored doughs or icings should be avoided because they have a tendency to affect flavor.
- d. Icings should be thick enough to prevent running.
- e. Icings should be applied evenly.
- f. Icings should have a firm exterior and a soft interior.
- g. Whole or half pieces of fruits and nuts used as garnishes give a more uniform and attractive appearance than small chopped pieces.
- h. Nuts are the most frequently used cookie garnishes.
- i. Chocolate icings are the most frequently used cookie icing.

10. Storage practices for cookies

- a. Most cookie doughs freeze well and may be thawed and baked as needed.
- b. Stiff doughs should be thawed under refrigeration.
- c. Soft doughs may be thawed at room temperature.
- d. Pack cookies only after cooling.
- e. A freshly cut apple stored with soft cookies will keep cookies moist.
- f. Soft cookies should not be stacked.
- g. Foam cookies dry out easily, so they should be made in small batches, used quickly, and stored in air-tight containers.

11. Types of convenience cookie products

- a. Packaged mixes
- b. Refrigerated or frozen doughs
- c. Frozen, prebaked cookies

Cookies Unit 6

Job Sheet 1—Prepare and Evaluate Chocolate Chip Cookies

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (Evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Oven
Mixer

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 1

Name: Chocolate Chip Cookies		
Yield: 8 dozen		Portion: 2 cookies per serving
Utensils: Mixing bowl, measuring spoons, measuring cups, baker's scale, mixing spoon, baking sheet, No. 60 disher		
Ingredients	Quantity	Method
Shortening	6 oz.	1. Cream shortening and sugars at medium speed for 5 minutes.
Granulated sugar	4 oz.	2. Add eggs and vanilla; mix until well blended.
Brown sugar	4 oz.	3. Add combined dry ingredients at low speed.
Eggs	2	4. Add nuts and chocolate chips; mix until blended.
Vanilla	1 t.	5. Drop on greased baking sheet with No. 60 disher.
Flour	10 oz.	6. Bake at 375°F, 10 to 12 minutes.
Salt	1 t.	
Soda	1 t.	
Nuts, chopped	8 oz.	
Chocolate chips	12 oz.	

- ☐ 3. Evaluate the chocolate chip cookies.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Regular, even shape Not overbaked or underbaked				
Flavor	Well blended ingredients				
Internal Structure	Even cells Free of tunnels				
Texture	Thin cookies crisp and tender Drop cookies chewy and tender				
Color	Uniform Characteristic of kind				

Total Points _____

Job Sheet 1

Scoring

21-25 points — Servable; good technique
16-20 points — Check technique; serve with improvement in mind
10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.

- ☐ 6. Clean the work area.

Evaluator's comments: _____

Cookies Unit 6

Job Sheet 2—Prepare and Evaluate Brownies

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (Evaluation score of 16 or more points)	_____

Instruction: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Oven
Mixer

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 2

Name: Brownies		
Yield: 48	Portion: 2" x 2½" servings	
Utensils: Mixing bowl, measuring spoons, baker's scale, mixing spoon, baking pan		
Ingredients	Quantity	Method
Eggs	12	1. Beat eggs at high speed.
Sugar	2 lb.	2. Add sugar, shortening, and vanilla. Mix at medium speed 5 minutes.
Shortening, melted	1 lb.	3. Add combined dry ingredients. Mix at low speed about 5 minutes.
Vanilla	¼ c.	4. Add nuts. Mix to blend.
Cake flour	12 oz.	5. Spread mixture ½" thick in pan.
Cocoa	8 oz.	6. Bake at 325°F, 25 to 30 minutes. Do not overbake.
Baking powder	4 t.	7. While warm, sprinkle with powdered sugar or cover with a thin layer of mocha or chocolate frosting if desired.
Salt	2 t.	
Nuts, chopped	12 oz.	
Notes: 1. 3 oz. unsweetened chocolate may be substituted for the cocoa. 2. 2 lb. chopped dates may be added. 3. For 18" x 26" bun pan, use 1½ times the recipe.		

- ☐ 3. Evaluate the brownies.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Regular, even shape Not overbaked or underbaked				
Flavor	Well blended ingredients				
Internal Structure	Even cells Free of tunnels				
Texture	Thin cookies crisp and tender Drop cookies chewy and tender				
Color	Uniform Characteristic of kind				

Total Points _____

Job Sheet 2**Scoring**

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.

- ☐ 6. Clean the work area.

Evaluator's comments: _____

Cookies Unit 6

Job Sheet 3—Prepare and Evaluate Chocolate Icebox Cookies

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (Evaluation score of 16 or more points)	_____

Instruction: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Oven
Mixer

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 3

Name: Chocolate Icebox Cookies		
Yield: Approx. 120 one-oz. cookies Portion: 2 cookies per serving		
Utensils: Mixing bowl, measuring spoons, baker's scale, sifter, dough cutter, baking sheet		
Ingredients	Quantity	Method
Powdered sugar, sifted	1 lb. 12 oz.	1. Place powdered sugar, butter or margarine, shortening, and salt in mixing bowl; cream together.
Butter or margarine	12 oz.	2. Add vanilla, eggs, and milk; blend together well.
Shortening	12 oz.	3. Sift dry ingredients together.
Salt	½ oz.	4. Add to mixing bowl; blend only enough to mix in well. Do not overmix.
Vanilla	2 t.	5. Scale dough into 24-oz. portions.
Eggs, whole	12 oz.	6. Form each portion into rolls approx. 2" in diameter.
Milk	4 oz.	7. Cover with wax paper and refrigerate overnight.
Baking soda	¼ oz.	8. Slice into 24 equal slices per roll.
Cake flour, sifted	3 lb.	9. Place on ungreased baking sheet.
Cocoa	8 oz.	10. Bake at 375°F, 6 to 8 minutes.
Notes: 1. Chocolate chips may be added to this dough. 2. Checkerboard and pinwheels can be made from yellow mix and chocolate mix.		

- ☐ 3. Evaluate the chocolate icebox cookies.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Job Sheet 3

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Regular, even shape Not overbaked or underbaked				
Flavor	Well blended ingredients				
Internal Structure	Even cells Free of tunnels				
Texture	Thin cookies crisp and tender Drop cookies chewy and tender				
Color	Uniform Characteristic of kind				

Total Points _____

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.

Job Sheet 3

- ☐ 6. Clean the work area.

Evaluator's comments: _____

Cookies **Unit 6**

Job Sheet 4—Prepare and Evaluate Sugar Cookies

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (Evaluation score of 16 or more points)	_____

Instruction: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Oven
Mixer

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 4

Name: Sugar Cookies		
Yield: 7 dozen		Portion: Two 2" cookies per serving
Utensils: Mixing bowl, measuring spoons, baker's scale, mixing spoon, cutting board, baking sheet, cookie press or No. 60 disher		
Ingredients	Quantity	Method
Butter or margarine	8 oz.	1. Cream butter or margarine and sugar at medium speed for 5 minutes.
Sugar	8 oz.	2. Add eggs and vanilla.
Eggs	2	3. Blend at medium speed for 2 minutes
Vanilla	2 t.	4. Add combined dry ingredients; mix at low speed.
Flour	12 oz.	5. Roll dough $\frac{1}{8}$ " thick on board lightly dusted with a mixture of 1 c. flour and $\frac{1}{2}$ c. sugar.
Salt	1 t.	6. Cut into desired shapes.
Baking powder	1 t.	7. Place on ungreased cookie sheets.
		8. Bake at 400°F for 7 minutes.
Note: Cookies also may be shaped with cookie press or may be measured with No. 60 disher onto a baking sheet about 1½ inches apart and flattened to $\frac{1}{4}$ inch thickness with stamper dipped in sugar.		

- ☐ 3. Evaluate the sugar cookies.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Regular, even shape Not overbaked or underbaked				
Flavor	Well blended ingredients				
Internal Structure	Even cells Free of tunnels				
Texture	Thin cookies crisp and tender Drop cookies chewy and tender				
Color	Uniform Characteristic of kind				

Total Points _____

Job Sheet 4**Scoring**

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.

- ☐ 6. Clean the work area.

Evaluator's comments: _____

Cookies Unit 6

Job Sheet 5—Prepare and Evaluate Butterscotch Icebox Cookies

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (Evaluation score of 16 or more points)	_____

Instruction: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Oven
Mixer

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 5

Name: Butterscotch Icebox Cookies		
Yield: 8 dozen		Portion: Two 2" cookies per serving
Utensils: Mixing bowl, measuring spoons, baker's scale, mixing spoon, wax paper, baking sheet		
Ingredients	Quantity	Method
Butter or margarine	8 oz.	1. Cream shortening and sugars.
Shortening	8 oz.	2. Add eggs and vanilla.
Sugar, granulated	12 oz.	3. Mix at medium speed for 5 minutes
Brown sugar	1 lb.	4. Add combined dry ingredients, dates, and nuts.
Eggs	4	5. Mix at low speed until well blended.
Vanilla	2 t.	6. Scale dough into 2-lb. portions.
Flour	2 lb.	7. Form each portion into rolls approximately 2" in diameter.
Cream of tartar	2 t.	8. Wrap wax paper around each roll.
Soda	2 t.	9. Place in refrigerator and chill several hours.
Dates, finely chopped	8 oz.	10. Slice cookies $\frac{1}{8}$ " thick.
Nuts, chopped	8 oz.	11. Place on ungreased baking sheet.
		12. Bake at 400°F, 8 to 10 minutes.

- ☐ 3. Evaluate the butterscotch icebox cookies

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Regular, even shape Not overbaked or underbaked				
Flavor	Well blended ingredients				
Internal Structure	Even cells Free of tunnels				
Texture	Thin cookies crisp and tender Drop cookies chewy and tender				
Color	Uniform Characteristic of kind				

Total Points _____

Job Sheet 5

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.

- ☐ 6. Clean the work area.

Evaluator's comments: _____

**Cookies
Unit 6****Job Sheet 6—Prepare and Evaluate Vanilla Wafers**

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (Evaluation score of 16 or more points)	_____

Instruction: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Oven
Mixer

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 6

Name: Vanilla Wafers		
Yield: Approx. 120 ½-oz. cookies Portion: 4 cookies per serving		
Utensils: Mixing bowl, mixing spoon, baker's scale, pastry bag, pastry tube, measuring spoons, baking sheet, No. 60 disher for ½-oz. cookie; No. 40 disher for ¾-oz. cookie; No. 30 disher for 1-oz. cookie		
Ingredients	Quantity	Method
Sugar, granulated	1 lb.	1. Place sugar, butter or margarine, shortening, and salt in mixer bowl; cream together.
Butter or margarine	8 oz.	2. Add vanilla and eggs; blend well.
Shortening	8 oz.	3. Add flour; blend only enough to mix well.
Salt	¼ oz.	4. Place cookie dough in pastry bag tipped with plain tube. See Job Sheet 9.
Vanilla	2 t.	5. Bag out on lightly greased pans in approx. 1" drops, leaving space between drops for spreading.
Eggs, whole	12 oz.	6. Bake at 375°F, 4 to 6 minutes.
Pastry flour	1 lb. 6 oz.	
Note: Dough may be dropped with spoon or disher.		

- ☐ 3. Evaluate the vanilla wafers.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Regular, even shape Not overbaked or underbaked				
Flavor	Well blended ingredients				
Internal Structure	Even cells Free of tunnels				
Texture	Thin cookies crisp and tender Drop cookies chewy and tender				
Color	Uniform Characteristic of kind				

Total Points _____

Job Sheet 6**Scoring**

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.

- ☐ 6. Clean the work area.

Evaluator's comments: _____

Cookies **Unit 6**

Job Sheet 7—Prepare and Evaluate Yellow Icebox Cookies

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (Evaluation score of 16 or more points)	_____

Instruction: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Oven
Mixer

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 7

Name: Icebox Cookies (Yellow Mix)		
Yield: Approx. 120 1-oz. cookies		Portion: Two 1-oz. cookies per serving
Utensils: Mixing bowl, measuring spoons, baker's scale, dough cutter, baking sheets, mixing spoon, wax paper		
Ingredients	Quantity	Method
Powdered sugar	2 lb.	1. Place powdered sugar, butter or margarine, shortening, and salt in mixing bowl; cream together.
Butter or margarine	1 lb.	2. Add the eggs and vanilla; blend well.
Shortening	1 lb.	3. Add flour; blend only enough to mix in well. Do not overmix.
Salt	$\frac{1}{2}$ oz.	4. Scale dough into 24-oz. portions.
Vanilla	2 t.	5. Form each portion into rolls approx. 2" in diameter.
Eggs, whole	8 oz.	6. Wrap wax paper around each roll.
Cake flour, sifted	3 lb.	7. Place in refrigerator overnight.
		8. Slice each roll into 24 equal slices.
		9. Place on ungreased baking sheet.
		10. Bake at 375°F, 6 to 8 minutes.
Notes: 1. Fruit or nuts may be added to the mix. 2. Checkerboard and pinwheels can be made from yellow mix and chocolate mix.		

- ☐ 3. Evaluate the yellow icebox cookies.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Job Sheet 7

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Regular, even shape Not overbaked or underbaked				
Flavor	Well blended ingredients				
Internal Structure	Even cells Free of tunnels				
Texture	Thin cookies crisp and tender Drop cookies chewy and tender				
Color	Uniform Characteristic of kind				

Total Points _____

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

Job Sheet 7

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.
- ☐ 6. Clean the work area.

Evaluator's comments: _____

Cookies Unit 6

Job Sheet 8—Prepare and Evaluate Pinwheel Cookies

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (Evaluation score of 16 or more points)	_____

Instruction: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Oven
Mixer

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 8

Name: Pinwheel Cookies		
Yield: Approx. 240 ½-oz. cookies		Portion: Two cookies per serving
Utensils: Mixing bowl, measuring spoons, baker's scale, dough cutter, baking sheets, mixing spoon, wax paper, parchment paper, rolling pin, floured cloth, pastry brush, French knife		
Ingredients	Quantity	Method
Egg wash Dusting flour Yellow icebox cookie ingredients Chocolate icebox cookie ingredients	½ c. 1 c.	1. Make yellow icebox cookie dough. See Job Sheet 7. 2. Make chocolate icebox cookie dough. See Job Sheet 3. 3. Scale each type of dough into separate 30-oz. portions. 4. Form portions into rolls approx. 3" in diameter. 5. Wrap each roll in wax paper, and refrigerate overnight. 6. Remove one roll of each type from refrigerator. 7. Knead each portion lightly until pliable. 8. With hands, flatten one portion of yellow dough on floured cloth into a rectangular shape. 9. Dust rolling pin with flour. 10. Roll dough into rectangular shape ¼" thick; lift from cloth and set to one side. 11. Roll portion of chocolate dough in same manner, and brush off excess flour. 12. Brush top of chocolate dough with egg wash. 13. Place yellow dough on top of chocolate dough. Note: Yellow dough may be dusted with flour and rolled on rolling pin to transfer 14. Brush top of yellow dough with egg wash. 15. Beginning at short edge, roll layered dough to form a log approx. 2 or 3 inches thick.

Page 1 of 2

Job Sheet 8

Ingredients	Quantity	Method
		16. Place on sheet pan lined with wax paper and return to refrigerator. 17. Roll the rest of the dough portions in the same manner. 18. Wrap in wax paper and place in refrigerator or freezer. 19. Slice frozen or chilled rolls into 1/4" slices. 20. Place on lightly greased pans lined with parchment paper, and allow to return to room temperature. 21. Bake at 375°F, 6 to 8 minutes.

- ☐ 3. Evaluate the pinwheel cookies.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Regular, even shape Not overbaked or underbaked				
Flavor	Well blended ingredients				
Internal Structure	Even cells Free of tunnels				
Texture	Thin cookies crisp and tender Drop cookies chewy and tender				
Color	Uniform Characteristic of kind				

Total Points _____

Scoring

- 21-25 points — Servable; good technique
 16-20 points — Check technique; serve with improvement in mind
 10-15 points — Check technique; do not serve

Job Sheet 8

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.

- ☐ 6. Clean the work area.

Evaluator's comments: _____

**Cookies
Unit 6****Job Sheet 9—Use a Pastry Bag to Bag Out Wafer Cookies**

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Equipment and utensils assembled prior to beginning	_____
Pastry bag held and filled correctly	_____
Bag held at correct angle to baking pan	_____
Cookies uniform in size and spacing on baking pan	_____

Instruction: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Large pastry bag, 18 inch
No. 10 plain tube
Baking pans
Parchment paper or shortening
Vanilla wafer cookie dough (Job Sheet 6)
Spatula

B. Procedure

- ☐ 1. Line baking pans with parchment paper, or lightly grease pans with melted shortening.
- ☐ 2. Place a No. 10 plain tube on the end of the pastry bag.

Job Sheet 9

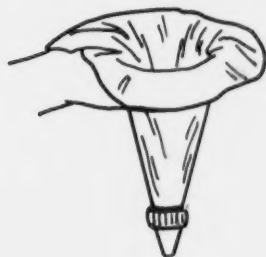
- ☐ 3. Hold your hand in the shape of a C. (Figure 1)

Figure 1



- ☐ 4. Place the pastry bag in your hand and turn down the upper edge. (Figure 2)

Figure 2



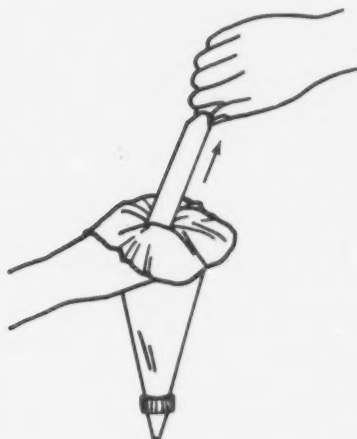
- ☐ 5. Dip up some cookie dough with a spatula, and place in pastry bag.

Job Sheet 9

- ☐ 6. Close your hand over the spatula above the dough, and then withdraw the spatula. (Figure 3)

Note: Fill pastry bag between half to three-quarters full. Do not exceed this amount.

Figure 3



- ☐ 7. Twist the top of the pastry bag to keep the dough in and to force the dough down the tube. (Figure 4)

Figure 4



Job Sheet 9

- ☐ 8. Holding the pastry bag at the top; twist and then twist again in the center. (Figure 5)

Note: This technique divides the dough in half and makes it easier to press it out of the tube. It is especially helpful when working with a large pastry bag.

Figure 5



- ☐ 9. Holding the pastry bag at a 90-degree angle to the baking pan, press dough out in approximately 1-inch drops with your lower hand.

Note: Keep the top of the bag twisted lightly as you go to keep the dough from coming out.

- ☐ 10. Bake cookies as directed in Job Sheet 6 vanilla wafer recipe.

Evaluator's comments: _____

Yeast Breads and Rolls

Unit 7

Objective Sheet

Unit Objective

After completing this unit, the student should be able to prepare and evaluate yeast breads and rolls. The student should demonstrate these competencies by completing the job sheets and scoring a minimum of 85 percent on the written test.

Specific Objectives

After completing this unit, the student should be able to:

1. Match terms related to yeast breads and rolls with their definitions.
2. Select facts about using yeast in bread doughs.
3. List reasons for mixing dough.
4. Select from a list true statements about basic methods of mixing dough.
5. Arrange in order the production stages for bread and roll dough.
6. Select facts about quality standards for yeast breads and rolls.
7. Identify common types of yeast-raised rolls.
8. Match common problems of yeast-raised products with their causes.
9. Select facts about storage methods for unbaked yeast dough.
10. Distinguish between short-term and long-term storage methods for baked bread and rolls.
11. Prepare and evaluate white bread. (Job Sheet 1)
12. Prepare and evaluate yeast rolls. (Job Sheet 2)
13. Prepare and evaluate sponge rolls. (Job Sheet 3)

Yeast Breads and Rolls

Unit 7

Suggested Activities

Instructional Plan

1. Read the unit carefully and plan for instruction. Study the specific objectives to determine the order in which you will present them.
2. Review the teaching suggestions below, and plan classroom activities. Integrate workplace skills as they apply to your vocational program.
3. Plan your presentation to take advantage of student learning styles and to accommodate special needs students.
4. Obtain materials to supplement instruction of this unit. See ordering information in the "Suggested Supplemental Resources" section.
5. Review instructions for evaluating student outcomes/performance and make copies of unit evaluation form.
6. Provide students with unit of instruction.
7. Discuss unit and specific objectives.
8. Discuss and demonstrate the job sheet techniques, and review the evaluation criteria for each. Schedule performance dates.
9. Discuss the use of the Unit Evaluation Form with the students, and select and discuss the rating scale that will be used for student evaluation.
10. Give written test.
11. Compile job sheet ratings and written test scores on the Unit Evaluation Form.
12. Reteach and retest as required.

Teaching Suggestions

1. Demonstrate yeast bread preparation to class. Prepare enough dough in varying stages to save time.
2. Emphasize time in the preparation of dough.

Suggested Activities

3. Show students examples of the common types of yeast rolls illustrated in Information Sheet, Objective 7.
4. Discuss and demonstrate the various make-up techniques for the types of rolls illustrated in Information Sheet, Objective 7. Allow students to practice these techniques. Skill areas: **listening, learning to learn.**
5. Discuss and demonstrate various bread and roll mixes, frozen bread production, and various roll doughs. Explain the reasons for their uses. Skill area: **listening.**

Resources Used in Developing This Unit

1. Armendola, Joseph. *The Baker's Manual for Quantity Baking and Pastry Making*, 3rd ed. Jenks, OK: Williams Book Company.
2. *Baking Handbook for the School and Food Service Program*. Minneapolis, MN: General Mills, Inc.
3. Shugart, Grace and Mary Molt. *Food for Fifty*, 8th ed. New York: Macmillan, 1989.

Suggested Supplemental Resources

Order "Baking Yeast-Raised Breads and Yeast-Raised Rolls" and catalog listing other materials pertinent to yeast breads and rolls from:

Prentice-Hall Media
ServCode BF
150 White Plains Road
Tarrytown, NY 10591

Instructions For Evaluating Student Performance

When the student is ready to perform a specific task, obtain a copy of the job sheet which may be found in either the teacher or student edition. Then observe the student performing the procedure.

Process evaluation—Place a mark in the box to the left of each designated checkpoint if the student has satisfactorily achieved the step(s) for each checkpoint area. If the student is unable to correctly complete the procedure, have the student review the materials and try again.

Suggested Activities

Product evaluation—Once the student has satisfactorily completed the procedure, rate the student product (outcome) using the criteria which have been provided as part of the job sheet. If the student's product is unacceptable, have the student review the materials and submit another product for evaluation.

Sample performance evaluation keys have been provided below. Many other keys are available. Select one rating (grading scale) which best fits your program needs.

Option A

- 4 - Skilled—Can perform job with no additional training.
- 3 - Moderately skilled—Has performed job during training program; limited additional training may be required.
- 2 - Limited skill—Has performed job during training program; additional training is required to develop skill.
- 1 - Unskilled—Is familiar with process, but is unable to perform job.

Option B

- Yes—Can perform job with no additional training.
- No—Is unable to perform job satisfactorily.

Yeast Breads and Rolls Unit 7

Answers to Written Test

1. a. 8 g. 23 l. 4 q. 2 v. 21
 b. 24 h. 11 m. 16 r. 17 w. 25
 c. 10 i. 26 n. 7 s. 6 x. 9
 d. 18 j. 19 o. 22 t. 5 y. 12
 e. 13 k. 1 p. 14 u. 3 z. 15
 f. 20

2. a. 2 f. 2
 b. 4 g. 3
 c. 3 h. 2
 d. 4 i. 1
 e. 1

3. a. To bring about a uniform mixture of ingredients
 b. To form a smooth dough
 c. To distribute yeast cells evenly so that they will receive proper nutrition
 d. To develop the gluten in the dough

4. a, b, d

5. a. 9 d. 1 g. 4 j. 10
 b. 11 e. 7 h. 2 k. 12
 c. 5 f. 3 i. 8 l. 6

6. a. 2 e. 3
 b. 1 f. 4
 c. 4 g. 1
 d. 1

7. a. Parker House roll
 b. Double-knot roll
 c. Butterflake roll
 d. Cloverleaf roll
 e. Single-knot roll
 f. Braided roll
 g. Pan roll
 h. Crescent roll

8. a. 5 d. 6
 b. 1 e. 4
 c. 3 f. 2

Answers to Written Test

- | | | | | |
|----|----|---|----|---|
| 9. | a. | 4 | d. | 1 |
| | b. | 1 | e. | 2 |
| | c. | 4 | f. | 3 |
10. a

335

Yeast Breads and Rolls Unit 7

Written Test

Name _____ Score _____

1. Match terms related to yeast breads and rolls with their definitions. Write the correct numbers in the blanks.

- | | | |
|----------|--|---------------------|
| _____ a. | To heat an oven to the correct temperature before putting bread in to bake | 1. Dough |
| _____ b. | A small piece of baked, yeast-raised dough | 2. Grease |
| _____ c. | A granular form of yeast that may be combined with other dry ingredients for mixing into bread dough | 3. Rise |
| _____ d. | The process of making cuts in the tops of a bread loaf before baking | 4. Dissolve |
| _____ e. | To raise a yeast dough by putting it in a warm, moist place | 5. Formula |
| _____ f. | A shaped or molded mass of bread | 6. Sheeting |
| _____ g. | To allow dough to sit after punching, scaling, and rounding so that gluten strands relax for ease in rolling and cutting | 7. Compressed yeast |
| _____ h. | Dough that has been made smooth by additional mixing after the ingredients are blended; additional mixing also develops the gluten | 8. Preheat |
| _____ i. | To brush a liquid, such as eggs or milk, over the top of a product before it is baked | 9. Volume |
| _____ j. | In stages; step by step; little by little | 10. Dry yeast |
| _____ k. | A mixture of ingredients that is thick enough to be kneaded or rolled out | 11. Developed dough |
| | | 12. Fermentation |
| | | 13. Proof |
| | | 14. Knead |

Written Test

- | | | |
|---------|---|------------------|
| _____l. | To mix dry ingredients into a liquid by stirring | 15. Stir |
| _____m. | Technique used for rounding individual rolls | 16. Benching |
| _____n. | A moist form of yeast that must be dissolved in liquid before being used in dough | 17. Pan-proofing |
| _____o. | To form or shape, as in molding a roll or loaf of bread | 18. Docking |
| _____p. | To fold and press dough to force out gas | 19. Gradually |
| _____q. | To apply fat or oil to the inside bottom and sides of a baking pan with a brush or pad | 20. Loaf |
| _____r. | The final proofing process in which shaped rolls and loaves of bread in baking pans are placed in a proof box to rise | 21. Punch |
| _____s. | In mixing dough, the point at which the dough pulls into long, flat strands | 22. Makeup |
| _____t. | Another term used in bakeries to refer to a standardized recipe | 23. Rest |
| _____u. | To increase in volume and become light and spongy | 24. Roll |
| _____v. | To press raised dough with a fist to force out extra gases trapped during the rising process | 25. Rounding |
| _____w. | The shaping of dough pieces to seal the ends | 26. Wash |
| _____x. | The size of a product, especially in relation to its weight | |
| _____y. | The process of raising a dough through the action of yeast | |
| _____z. | To mix with a circular motion | |

Written Test

2. Select facts about using yeast in bread doughs. Write the correct numbers in the blanks.

_____a. What kind(s) of yeast may be used in making yeast doughs?

1. Instant compressed or inert dry
2. Compressed or active dry
3. Granulated compressed or powdered
4. Only active dry

_____b. When substituting active dry yeast for compressed yeast, what percent by weight is used?

1. 20
2. 30
3. 40
4. 50

_____c. What water temperature is suitable for softening compressed yeast?

1. 75°F
2. 85°F
3. 95°F
4. 105°F

_____d. Which of the following is the temperature necessary to activate dry yeast?

1. 75°F
2. 85°F
3. 95°F
4. 105°F

_____e. With which of the following may active dry yeast be blended if desired?

1. Dry ingredients
2. Liquid ingredients
3. Food coloring
4. Wash

_____f. What is the best growing temperature range for yeast?

1. 75°F to 85°F
2. 80°F to 85°F
3. 85°F to 95°F
4. 95°F to 105°F

Written Test

- _____ g. At what temperature are yeast cells destroyed?
1. 120°F
 2. 130°F
 3. 140°F
 4. 150°F
- _____ h. Which of the following (with temperature) controls the fermentation rate of yeasts in doughs?
1. Sugar
 2. Salt
 3. Flour
 4. Baking powder
- _____ i. What yeast food accelerates the growth and action of yeast?
1. Sugar
 2. Salt
 3. Flour
 4. Baking powder
3. List reasons for mixing dough.
- a. _____
 - b. _____
 - c. _____
 - d. _____
4. Select from a list true statements about basic methods of mixing dough. Write an "X" in the blank before each correct method.
- _____ a. Mixing is accomplished in a single operation using the straight dough method.
 - _____ b. In the sponge dough method, the sponge is permitted to rise and ferment to the desired point.
 - _____ c. Part of the flour, water, yeast, sugar, and shortening are mixed together in the straight dough method.
 - _____ d. All ingredients are mixed together into a smooth dough and allowed to rise again using the sponge dough method.

Written Test

5. Arrange in order the following production stages for bread and roll dough. Write a "1" before the first step, a "2" before the second step, and so on.

- _____ a. Panning
- _____ b. Baking
- _____ c. Scaling
- _____ d. Assembling raw materials
- _____ e. Bench proofing
- _____ f. Mixing and kneading
- _____ g. Fermenting
- _____ h. Weighing of ingredients
- _____ i. Shaping
- _____ j. Pan proofing
- _____ k. Cooling
- _____ l. Rounding

6. Select facts about standards of quality for yeast breads and rolls. Write the correct numbers in the blanks.

- _____ a. Which of the following is one of the shape quality standards for yeast breads and rolls?
 - 1. Evenly rounded sides
 - 2. Evenly rounded top
 - 3. Evenly rounded bottom
 - 4. Evenly rounded ends
- _____ b. Which of the following is NOT a quality standard for a yeast product crust?
 - 1. Uniformly pale
 - 2. Crisp and tender
 - 3. Smooth
 - 4. Free of cracks and bulges

Written Test

_____ c. What is the standard for a yeast product volume in proportion to its size?

1. Very dense
2. Heavy
3. Very heavy
4. Light

_____ d. What is the standard for grain and cell walls?

1. Elongated upward, evenly distributed; thin
2. Elongated sideways, evenly distributed; thick
3. Round, evenly distributed; thin
4. Crumbly, evenly distributed; thick

_____ e. What is the standard for internal texture?

1. Crumbly and dry
2. Tender with a elastic doughiness
3. Tender, elastic crumb; free of dryness or doughiness
4. Chewy and crumbly or doughy

_____ f. *"Characteristic of the ingredients used and free of dark streaks"* are the quality characteristics for which standard?

1. Flavor
2. Texture
3. Shape
4. Color

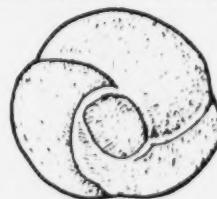
_____ g. What is the quality standard for flavor?

1. No undesirable flavor (sourness) from bacterial action
2. No flavor of yeast or other ingredients
3. No flavor of flour or other ingredients
4. No sweetness from ingredients

7. Identify common types of yeast-raised rolls. Write the correct names in the blanks.



a. _____



b. _____

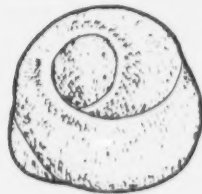
Written Test



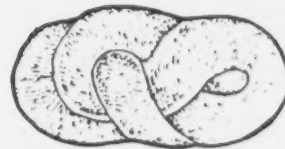
c. _____



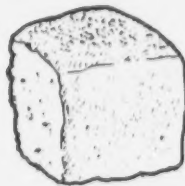
d. _____



e. _____



f. _____



g. _____



h. _____

8. Match common problems of yeast-raised products with their causes. Write the correct numbers in the blanks.

- _____ a. Underfermentation; undermixing; over-proofing; and using wrong flour
- _____ b. Old dough; too much yeast; and underfermentation
- _____ c. Old yeast; too little yeast; undermixing; and underfermentation
- _____ d. Too much yeast; oven temperature too low; and underbaking

- 1. Poor flavor and texture
- 2. Blisters on crust
- 3. Lack of volume
- 4. Poor keeping qualities

Written Test

- _____ e. Overbaking; products wrapped while hot; overfermentation; and underfermentation
- _____ f. Rough handling after proofing; too much heat and/or moisture in proofing cabinet; and too much top heat in oven
- 5. Coarse grain
- 6. Pale crust color

9. Select facts about storage methods for unbaked yeast dough. Write the correct numbers in the blanks.

- _____ a. What is the short-term storage life for yeast breads and rolls?
 - 1. 4 hours to 2 weeks
 - 2. 6 hours to 2 weeks
 - 3. 8 hours to 2 weeks
 - 4. 12 hours to 2 weeks
- _____ b. What is the long-term storage life for yeast breads and rolls?
 - 1. 2 to 4 weeks
 - 2. 1 to 2 weeks
 - 3. 4 to 6 weeks
 - 4. 6 weeks to 12 months
- _____ c. At what temperature range should short-term dough be refrigerated?
 - 1. 0°F to 25°F
 - 2. 25°F to 32°F
 - 3. 32°F to 36°F
 - 4. 36°F to 38°F
- _____ d. How long should short-term dough be refrigerated before baking?
 - 1. Overnight
 - 2. 6 hours
 - 3. 8 hours
 - 4. 1 hour
- _____ e. How should long-term dough be refrigerated before baking?
 - 1. Overnight
 - 2. Until frozen
 - 3. 1 hour
 - 4. Baked immediately after fermentation and makeup
- _____ f. How should long-term dough be treated just prior to proofing and baking?
 - 1. Proofed and baked while still frozen
 - 2. Thawed at room temperature for 12 hours
 - 3. Thawed in refrigerator for 24 hours
 - 4. Baked immediately after fermentation and makeup

Written Test

10. Distinguish between short-term and long-term storage methods for baked breads and rolls. Write "ST" before the short-term method.
- _____ a. Store in a closed cabinet at room temperature
 - _____ b. After rolls have been baked and cooled, wrap with a moisture-proof, vapor-proof material and freeze until needed.

*Permission to duplicate this test is granted.

**Yeast Breads and Rolls
Unit 7**

Unit Evaluation Form

Student Name _____ Unit Rating _____

Job Sheet 1—Prepare and Evaluate White Bread Rating _____

Comments: _____

Job Sheet 2—Prepare and Evaluate Yeast Rolls Rating _____

Comments: _____

Job Sheet 3—Prepare and Evaluate Sponge Rolls Rating _____

Comments: _____

Written Test Scores

Pretest _____ Posttest _____ Other _____

Other _____

Teacher Signature _____ Date _____

Student Signature _____ Date _____

*Permission to duplicate this form is granted.

Yeast Breads and Rolls Unit 7

Information Sheet

1. Terms and definitions

- a. **Benching** — Technique used for rounding individual rolls
- b. **Compressed yeast** — A moist form of yeast that must be dissolved in liquid before being used in dough
- c. **Developed dough** — Dough that has been made smooth by additional mixing after the ingredients are blended; additional mixing also develops the gluten
- d. **Dissolve** — To mix dry ingredients into a liquid by stirring
- e. **Docking** — The process of making cuts in the tops of a bread loaf before baking
- f. **Dough** — A mixture of ingredients that is thick enough to be kneaded or rolled out
- g. **Dry yeast** — A granular form of yeast that may be combined with other dry ingredients for mixing into bread dough
- h. **Fermentation** — The process of raising a dough through the action of yeast
- i. **Formula** — Another term used in bakeries to refer to a standardized recipe
- j. **Gradually** — In stages; step by step; little by little
- k. **Grease** — To apply fat or oil to the inside bottom and sides of a baking pan with a brush or pad
- l. **Knead** — To fold and press dough to force out gas
- m. **Loaf** — A shaped or molded mass of bread

Note: Loaves are made from yeast-raised dough and the shape is determined by the shape of the baking pan.
- n. **Makeup** — To form or shape, as in molding a roll or loaf of bread
- o. **Pan-proofing** — The final proofing process in which shaped rolls and loaves of bread in baking pans are placed in a proof box to rise
- p. **Preheat** — To heat an oven to the correct temperature before putting bread in to bake

Information Sheet

- q. **Proof** — To raise a yeast dough by putting it in a warm, moist place
- r. **Punch** — To press raised dough with a fist to force out extra gases trapped during the rising process
- s. **Rest** — To allow dough to sit after punching, scaling, and rounding so that gluten strands relax for ease in rolling and cutting
- t. **Rise** — To increase in volume and become light and spongy
- u. **Roll** — A small piece of baked, yeast-raised dough

Note: The shape is determined by the makeup of the dough and indicates the type of roll. See Information Sheet Section 7.
- v. **Rounding** — The shaping of dough pieces to seal the ends
- w. **Sheeting** — In mixing dough, the point at which the dough pulls into long, flat strands
- x. **Stir** — To mix with a circular motion
- y. **Volume** — The size of a product, especially in relation to its weight
- z. **Wash** — To brush a liquid, such as eggs or milk, over the top of a product before it is baked

2. Using yeast in bread doughs

- a. Use either compressed or active dry yeast in making yeast doughs.

Note: Instant dry yeast products are now available.
- b. When substituting active dry yeast for compressed yeast, used only 50 percent by weight.
- c. Soften compressed yeast in lukewarm liquid (95°F) before use.
- d. Soften active dry yeast in warm liquid (105°F) before use.

Note: This is the most commonly used method of activating yeast.
- e. Blend active dry yeast with the dry ingredients if desired.

Note: If this method is used, liquid may be heated to 120°F before adding because yeast is protected by other dry ingredients. This process is known as the *rapid mix method*.

Information Sheet

- f. Keep yeast at its best growing temperature range (between 80°F and 85°F) during fermentation.

Note: Yeast weakens rapidly when subjected to temperatures above 95°F. It is killed for fermentation purposes at 125°F. Yeast cells are destroyed at a temperature of 140°F.

- g. Know that the fermentation rate of doughs by yeast is controlled by the salt and temperature in recipes.
- h. Know that sugar, a ready source of food for the yeast, accelerates the growth and action of yeast.

3. Reasons for mixing dough

- a. To bring about a uniform mixture of ingredients
- b. To form a smooth dough
- c. To distribute yeast cells evenly so that they will receive proper nutrition
- d. To develop the gluten in the dough

Note: Gluten makes the dough more elastic and allows it to retain the gases formed by the yeast.

4. Basic methods of mixing dough

- a. Straight dough method
 - All ingredients are placed together in mixing bowl.
 - Mixing is accomplished in single operation.
 - Dough is then allowed to rise.
- b. Sponge dough method

Note: The sponge dough method is suited to larger commercial operations.

- Part of the flour, water, yeast, sugar, and shortening are mixed together.
- The sponge is permitted to rise and ferment to the desired point.
- The sponge is then put back into the mixer and combined with the balance of the ingredients.
- All ingredients are then mixed together into a smooth dough and allowed to rise again.
- The dough is then divided into the pieces and shapes desired.

Information Sheet**5. Production stages for bread and roll dough**

- a. Assembling raw materials
- b. Weighing of ingredients
- c. Mixing and kneading
- d. Fermenting
- e. Scaling
- f. Rounding
- g. Bench proofing
- h. Shaping
- i. Panning
- j. Pan proofing
- k. Baking
- l. Cooling

6. Standards of quality for yeast breads and rolls

Note: These are also the standards of quality for sweet yeast raised products.

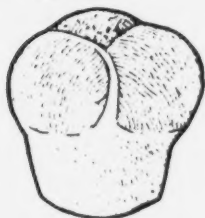
- a. Shape should be well proportioned; have evenly rounded top
- b. Crust should be uniformly brown, crisp, tender, smooth, and free of cracks and bulges
- c. Volume should be lightweight in proportion to size
- d. Internal texture should be tender, with elastic crumb; free of dryness or doughiness
- e. Grain should have fine cells elongated upward that are evenly distributed; cell walls should be thin
- f. Color should be characteristic of ingredients used and free of dark streaks
- g. Flavor should be characteristic of well-baked ingredients, free of undesirable flavor (sourness) from bacterial action or of yeast or other ingredients

Information Sheet

7. Common types of yeast-raised rolls (Figures 1-8)

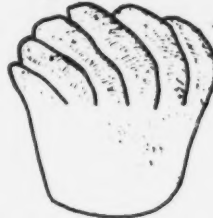
a. Cloverleaf

Figure 1



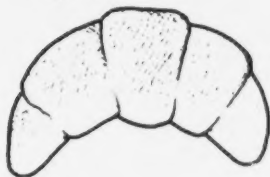
b. Butterflake

Figure 2



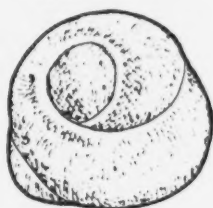
c. Crescent

Figure 3



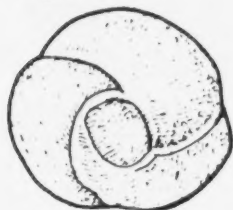
d. Single-knot

Figure 4



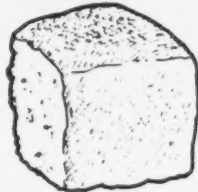
e. Double-knot

Figure 5



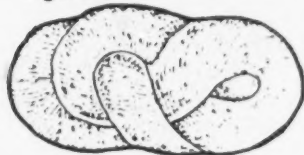
f. Pan

Figure 6



g. Braided

Figure 7



h. Parker House

Figure 8



Information Sheet

8. Causes of common problems of yeast-raised products

- a. Lack of volume
 - Old yeast
 - Too little yeast
 - Undermixing
 - Underfermentation
- b. Pale crust color
 - Too much yeast
 - Oven temperature too low
 - Underbaking
- c. Blisters on crust
 - Rough handling after proofing
 - Too much heat and/or moisture in proofing cabinet
 - Too much top heat in oven
- d. Coarse grain
 - Underfermentation
 - Undermixing
 - Overproofing
 - Using wrong flour
- e. Poor flavor and texture
 - Old dough
 - Too much yeast
 - Underfermentation

Information Sheet

- f. Poor keeping qualities
 - Overbaking
 - Products wrapped while hot
 - Overfermentation
 - Underfermentation

9. Storage methods for unbaked yeast dough

- a. Short-term (12 hours to 2 weeks)
 - Prepare dough according to recipe.
 - Ferment dough.
 - Make up into desired units.
 - Refrigerate at 36°F to 38°F overnight.

Note: Temperature must be low enough to retard yeast action.
 - Remove from refrigerator, proof, and bake.
- b. Long-term (2 to 4 weeks)
 - Follow first three steps of short-term storage method; then freeze individual units.
 - After dough is frozen, wrap with moisture- and vapor-proof material and store until needed.
 - Remove from freezer and thaw in refrigerator for 24 hours prior to baking.
 - Remove from refrigerator, proof, and bake.

10. Storage methods for baked breads and rolls

- a. **Short-term** — Store in a closed cabinet at room temperature
- b. **Long-term** — After rolls have been baked and cooled, wrap with a moisture- and vapor-proof material and freeze until needed.

Note: The suggested storage life is one week.

Yeast Breads and Rolls Unit 7

Job Sheet 1—Prepare and Evaluate White Bread

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Mixer
Range
Oven
Dough hook
Proof box

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 1

Name: White Bread		
Yield: 16 loaves		Portion: One ½-lb. loaf
Utensils: Baker's scale, measuring utensils, mixing bowl, mixing spoon, loaf pans		
Ingredients	Quantity	Method
Yeast, active dry	Two 2½-oz. packages	1. Soften yeast in warm water; let stand 10 minutes.
Water, warm (110°F)	3 c.	2. Combine sugar, salt, dry milk, water, and shortening.
Sugar	10 oz.	3. Add softened yeast.
Salt	5 oz.	4. Mix at medium speed until blended.
Nonfat dry milk	14 oz.	5. Add flour, and mix at low speed about 10 minutes or until dough is smooth and elastic.
Water, lukewarm	1 gal.	6. Let rise in a warm place (80°F) approx. 2 hours, or until double in bulk.
Shortening, melted	12 oz.	7. Knead.
Flour	15 lb.	8. Let rise approx. 1 hour.
		9. Knead.
		10. Scale dough into 16 ½-lb. loaves.
		11. Let rise until double in bulk, approx. 1½ hours.
		12. Bake at 400°F, 30 to 40 minutes.
Notes: 1. 1¼ gal. fresh milk may be substituted for the water and dry milk. 2. Substitute whole wheat flour for half of white flour to make whole-wheat bread.		

- ☐ 3. Evaluate the white bread.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Job Sheet 1

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Uniformly browned Smooth Free of cracks and bulges				
Flavor	Well-blended flavor of ingredients No sourness or yeast taste				
Texture	Tender, elastic crumb Free of dryness or doughiness				
Volume	Lightweight in proportion to size				
Uniformity	Well-proportioned, evenly rounded top				

Total Points _____

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

- a. Was the product servable? _____
- b. If the product was not servable, why? _____

- c. Which of the following should be improved? _____

- Measuring
 - Temperature
 - Mixing
 - Preparation

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.

Job Sheet 1

- ☐ 6. Clean the work area.

Evaluator's comments: _____

Yeast Breads and Rolls Unit 7

Job Sheet 2—Prepare and Evaluate Yeast Rolls

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Mixer
Range
Oven
Dough hook
Proof box

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 2

Name: Yeast Rolls		
Yield: 6 dozen		Portion: 1½-oz. roll
Utensils: Baker's scale, measuring utensils, mixing bowl, mixing spoon, baking sheet		
Ingredients	Quantity	Method
Sugar	4 oz.	1. Place sugar, salt, and shortening in mixing bowl.
Salt	3 T.	2. Add hot scalded milk.
Shortening	6 oz.	3. Mix at low speed to blend; cool to lukewarm.
Milk, scalded	1¼ qt.	4. Soften yeast in warm water.
Yeast, active dry	1½ oz.	5. Add softened yeast and eggs to milk mixture.
Water, warm (110°F)	1 c.	6. Add flour to make a moderately soft dough.
Eggs, beaten	4	7. Mix at low speed until smooth and satiny.
Flour	4 lb. 12 oz. (variable)	8. Place in lightly greased bowl and turn over to grease top.
		9. Cover and let rise in warm place (80°F) until double in bulk.
		10. Punch down.
		11. Divide into thirds for ease in handling, and shape into 1½-oz. rolls.
		12. Let rise until double in bulk.
		13. Bake at 400°F, 18 minutes.
Notes: 1. For compressed yeast, use 3 oz. softened in lukewarm (95°F) water. 2. For a quicker rising dough, increase yeast to 2 oz. dry, 4 oz. compressed. 3. Dry yeast may be mixed with dry ingredients. 4. 5 oz. nonfat dry milk plus 1¼ qt. water may be substituted for milk. Combine dry milk powder with sugar and salt.		

- ☐ 3. Evaluate the yeast rolls.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Job Sheet 2

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Uniformly browned Smooth Free of cracks and bulges				
Flavor	Well-blended flavor of ingredients No sourness or yeast taste				
Texture	Tender, elastic crumb Free of dryness or doughiness				
Volume	Lightweight in proportion to size				
Uniformity	Well-proportioned, evenly rounded top				

Total Points _____

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.

Job Sheet 2

- ☐ 6. Clean the work area.

Evaluator's comments: _____

Yeast Breads and Rolls Unit 7

Job Sheet 3—Prepare and Evaluate Sponge Rolls

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Mixer
Dough hook
Proof box
Oven
Range

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 3

Name: Sponge Rolls		
Yield: 12 dozen		Portion: 1½-oz. roll
Utensils: Baker's scale, measuring utensils, mixing bowl, mixing spoon, bun pans		
Ingredients	Quantity	Method
Water, warm Yeast, compressed Sugar Flour, hard wheat	3 pt. 3 oz. 2 T. 4 lb. 8 oz.	Sponge Stage 1. Dissolve together water, yeast, and sugar. 2. Add flour; blend and then mix with a dough hook for 5 minutes on second speed. 3. Cover sponge and allow to ferment for 4½ hours at room temperature, or cover tightly with vapor-proof wrap and refrigerate overnight. Note: The container should have a volume of at least four times the volume of the dough to allow for expansion. Dough Stage 1. Mix together on low speed flour, salt, sugar, and milk powder. 2. Dissolve water and yeast together and add to form dough. 3. Add sponge (previously made) and margarine to dough. 4. Mix 1 minute on low and then 5 minutes on second speed, using a dough hook. 5. Remove dough from mixer, round, and allow to rest for 15 minutes. 6. Scale dough into individual 1½-oz. units, make up, and place on prepared bun pans. 7. Wash tops lightly. 8. Allow to proof until double in size. 9. Bake at 400°F, 12 to 15 minutes.
Flour, hard wheat Salt Sugar Milk powder Water, warm Yeast, compressed Margarine Egg wash	3 lb. ¼ c. 12 oz. 6 oz. 1 pt. 2 oz. 12 oz. ½ c.	

- ☐ 3. Evaluate the sponge rolls.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Job Sheet 3

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Uniformly browned Smooth Free of cracks and bulges				
Flavor	Well-blended flavor of ingredients No sourness or yeast taste				
Texture	Tender, elastic crumb Free of dryness or doughiness				
Volume	Lightweight in proportion to size				
Uniformity	Well-proportioned, evenly rounded top				

Total Points _____

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.

Job Sheet 3

- ☐ 6. Clean the work area.

Evaluator's comments: _____

Sweet Yeast-Dough Products Unit 8

Objective Sheet

Unit Objective

After completing this unit, the student should be able to prepare and evaluate sweet yeast-dough products. The student should demonstrate these competencies by completing the job sheets and scoring a minimum of 85 percent on the written test.

Specific Objectives

After completing this unit, the student should be able to:

1. Match terms related to sweet yeast-dough products with their definitions.
2. Match types of sweet yeast-dough products with their descriptions.
3. Distinguish between Danish and basic sweet doughs.
4. Complete statements about the production of basic sweet yeast-dough.
5. Identify shaping operations for basic sweet rolls.
6. Select facts about the production of Danish pastry dough.
7. Identify shaping operations for common Danish pastries.
8. Complete statements about the production of doughnuts and other fried sweet yeast-dough products.
9. Identify shaping operations for common fried sweet yeast-dough products.
10. Select from a list basic types of fillings and toppings for sweet yeast-dough products.
11. Prepare and evaluate basic sweet rolls. (Job Sheet 1)
12. Prepare and evaluate cinnamon rolls. (Job Sheet 2)
13. Prepare Danish pastry dough. (Job Sheet 3)
14. Prepare and evaluate raised doughnuts. (Job Sheet 4)
15. Prepare a glaze and icing for sweet yeast-dough products. (Job Sheet 5)

Sweet Yeast-Dough Products

Unit 8

Suggested Activities

Instructional Plan

1. Read the unit carefully and plan for instruction. Study the specific objectives to determine the order in which you will present them.
2. Review the teaching suggestions below, and plan classroom activities. Integrate workplace skills as they apply to your vocational program.
3. Plan your presentation to take advantage of student learning styles and to accommodate special needs students.
4. Obtain materials to supplement instruction of this unit. See ordering information in the "Suggested Supplemental Resources" section.
5. Review instructions for evaluating student outcomes/performance and make copies of Unit Evaluation Form.
6. Provide students with unit of instruction.
7. Discuss unit and specific objectives.
8. Discuss and demonstrate the job sheet techniques, and review the evaluation criteria for each. Schedule performance dates.
9. Discuss the use of the Unit Evaluation Form with the students, and select and discuss the rating scale that will be used for student evaluation.
10. Give written test.
11. Compile job sheet ratings and written test scores on the Unit Evaluation Form.
12. Reteach and retest as required.

Suggested Activities

Teaching Suggestions

Note: Skill areas appearing in boldface type in the Teaching Suggestions refer to the academic and workplace skills identified by the American Society for Training and Development (ASTD) and the U.S. Department of Labor. These have been adapted by MAVCC.

1. Have students make a bulletin board with pictures of sweet yeast-dough products gathered from various trade magazines and other sources. Have students identify and label each product. Skill areas: **listening, oral communication, creative thinking, teamwork**
2. Demonstrate the shaping techniques for a variety of products. Allow students to practice these techniques. Skill area: **learning to learn**
3. Show filmstrips available from Prentice-Hall Media on sweet yeast-dough products. Skill areas: **listening**
4. Have students visit a retail bakery to view production techniques of sweet yeast dough products, then have students write up their observations. Skill areas: **writing, oral communication, listening, critical thinking**
5. Develop evaluation sheets for Danish pastry products not covered in this unit, but those that will be prepared by the class.

Resources Used in Developing This Unit

1. Armendola, Joseph. *The Baker's Manual for Quantity Baking and Pastry Making*, 3rd ed. Jenks, OK: Williams Book Company.
2. Armendola, J. and D. Lundberg. *Understanding Baking*. Boston: CBI Publishing Company, Inc.
3. *Baking Handbook for the School and Food Service Program*. Minneapolis, MN: General Mills, Inc.
4. Sultan, William J. *Elementary Baking*. New York: McGraw-Hill Book Company.
5. Shugart, Grace and Mary Molt. *Food for Fifty*, 8th ed. New York: Macmillan, 1989.

Suggested Supplemental Resources

Order sweet yeast-dough filmstrip, and catalog listing other materials pertinent to sweet yeast-doughs from:

Prentice-Hall Media
ServCode BF

Sweet Yeast-Dough Products
Unit 8

Answers to Written Test

1. a. 3
 b. 2
 c. 1
 d. 4
 e. 5
2. a. 3 e. 2
 b. 5 f. 1
 c. 8 g. 6
 d. 7 h. 4
3. b
4. a. 4 d. 2
 b. 1 e. 1
 c. 3 f. 3
5. a. Crumb buns
 b. Snail-shaped filled buns
 c. Cinnamon rolls
 d. Crescent rolls or horns
 e. Round filled buns
6. a. 1
 b. 3
 c. 2
 d. 4
7. a. Diamond
 b. Spiral coffeecake
 c. Turnover
 d. Pocket
 e. Cockscomb (bear claw)
8. a. 2
 b. 3
 c. 4
 d. 3
9. a. Doughnut
 b. Twist
 c. Bow tie
 d. Jelly-filled doughnut
 e. Long John
10. All are correct

Sweet Yeast-Dough Products Unit 8

Written Test

Name _____ Score _____

1. Match terms related to sweet yeast-dough products with their definitions. Write the correct numbers in the blanks.

- | | | |
|----------|---|------------------------|
| _____ a. | Thin icing or syrup used to seal in moisture | 1. Caramel |
| _____ b. | A raised sweet yeast-dough that has additional butter, margarine, or shortening rolled into it to provide flakiness | 2. Danish pastry dough |
| _____ c. | A mixture of brown sugar, shortening, honey, and milk | 3. Glaze |
| _____ d. | To slow down yeast action, usually by refrigeration or freezing | 4. Retard |
| _____ e. | A raised sweet yeast-dough enriched with sugar and eggs | 5. Sweet dough |

2. Match types of sweet yeast-dough products with their descriptions. Write the correct numbers in the blanks.

- | | | |
|----------|--|------------------|
| _____ a. | A variety of sweet roll that has a crumb topping | 1. Cinnamon roll |
| _____ b. | A variety of Danish pastry shaped by folding all four corners of a pastry square to the center and placing a garnish where they meet | 2. Diamond |
| _____ c. | A sweet-dough product baked in a multiple-serving size and shaped in a variety of ways with a variety of fillings and toppings | 3. Crumb bun |
| | | 4. Turnover |

Written Test

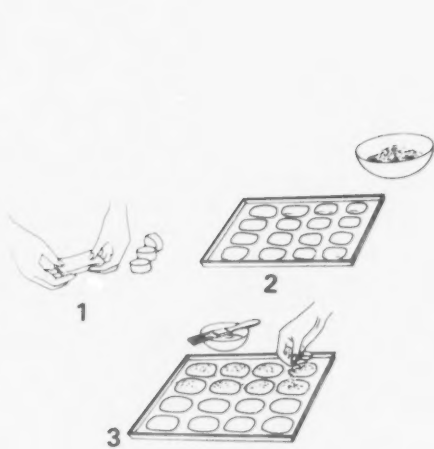
- _____ d. A variety of sweet roll in which, before baking begins, a prepared filling is placed in an indentation made in the center of each roll
- _____ e. A variety of Danish pastry shaped by folding two corners of a pastry square over a filling placed in the center of the square
- _____ f. A variety of sweet roll in which rolled dough is sprinkled with cinnamon/sugar, sliced, and often baked in a caramel syrup
- _____ g. A variety of filled Danish pastry in which slits are spread open to expose the filling
- _____ h. A triangular-shaped variety of Danish pastry in which the filling is sealed inside the pastry covering
5. Pocket
6. Cockscomb (bear claw)
7. Filled round bun
8. Coffeecake
3. Distinguish between basic and Danish sweet doughs. Write a "D" before the description of Danish sweet dough.
- _____ a. A rich yeast dough with a high percentage of sugar, shortening, eggs, and milk
- _____ b. Includes production stage in which shortening is rolled into the dough to produce layers for a flaky product
4. Complete statements about the production of basic sweet yeast-dough. Write the correct numbers in the blanks.
- _____ a. Basic sweet yeast-dough production consists of variations in the production stages of yeast raised dough. The methods of combining ingredients are altered to prevent ____.
1. proofing
 2. layered flakiness
 3. fermentation
 4. overmixing

Written Test

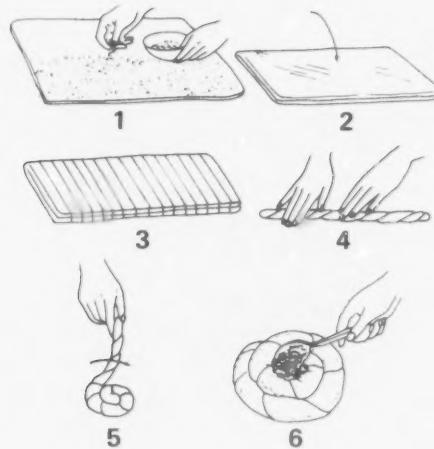
- _____ b. Sweet yeast-doughs are slightly _____ because the individual units _____ faster.
1. underfermented; proof
 2. overfermented; bake
 3. undermixed; proof
 4. overbaked; bake
- _____ c. The _____ of individual units varies because of the varied fillings, shapes, toppings, and icings used.
1. ingredients
 2. baking time
 3. make-up
 4. size
- _____ d. Sweet yeast-dough products should be fully proofed at _____ with relative humidity at _____ percent.
1. 100°F to 110°F; 70 to 75
 2. 95°F to 98°F; 80 to 85
 3. 85°F to 95°F; 60 to 65
 4. 85°F to 88°F; 75 to 78
- _____ e. Sweet yeast-dough products should be baked _____.
1. quickly
 2. slowly
 3. at low temperatures
 4. at very high temperatures
- _____ f. With few exceptions, all sweet yeast-dough products should be _____ as they come from the oven.
1. refrigerated
 2. frozen
 3. glazed
 4. served

Written Test

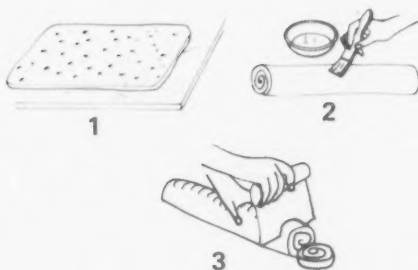
5. Identify shaping operations for basic sweet rolls. Write the correct sweet roll names in the blanks.



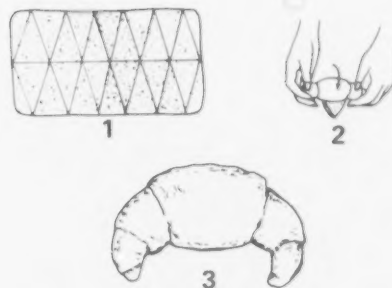
a. _____



b. _____



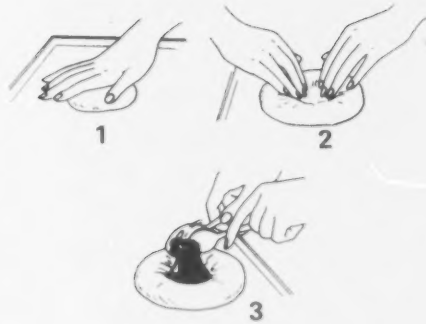
c. _____



d. _____

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Written Test



e. _____

6. Select facts about the production of Danish pastry dough. Write the correct numbers in the blanks.

_____ a. How do Danish dough and sweet yeast-dough mixing methods differ?

1. Danish dough is mixed only until the ingredients are blended.
2. Danish dough is hand mixed while sweet-yeast dough is mixed with a dough hook.
3. Danish dough is mixed with a mixer at high speeds to incorporate air to make the product lighter.
4. Danish dough is mixed for a longer period of time than is sweet yeast-dough.

_____ b. How long is Danish dough allowed to ferment?

1. 10 to 12 minutes
2. 8 to 10 minutes
3. 15 to 20 minutes
4. 30 minutes

Written Test

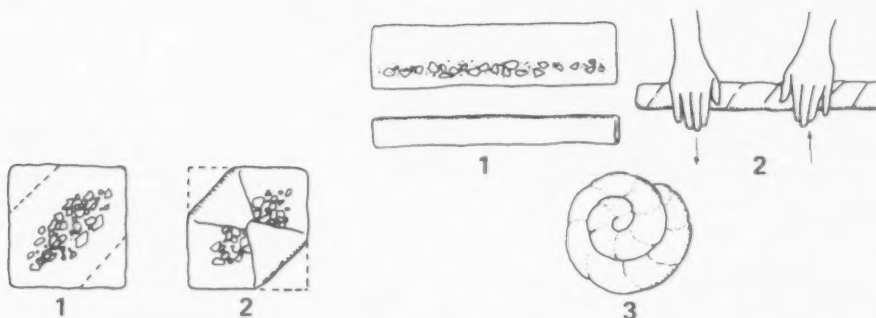
_____c. How is Danish dough processed immediately after it is scaled and dotted with butter, margarine, or shortening?

1. It is rapidly chilled
2. It is folded in the three-fold or four-fold method
3. It is thrown on a floured board and rolled very thin
4. It is punched down and proofed

_____d. At what temperature are Danish pastry products proofed?

1. 85°F to 90°F
2. 100°F to 110°F
3. 75°F to 78°F
4. 95°F to 98°F

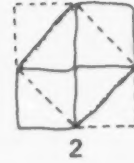
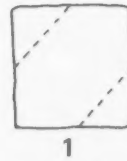
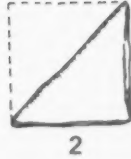
7. Identify shaping operations for common Danish pastries. Write the correct pastry names in the blanks.



a. _____ b. _____

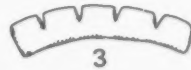
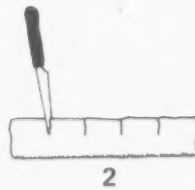
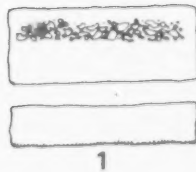
374

Written Test



c. _____

d. _____



e. _____

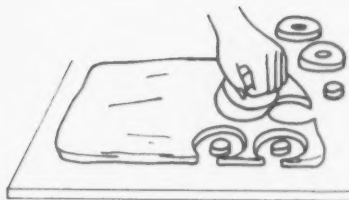
8. Complete statements about the production of doughnuts and other fried sweet yeast-dough products. Write the correct numbers in the blanks.

_____ a. As a general rule, best results are obtained by mixing fried sweet-dough until the dough ____ the mixing bowl.

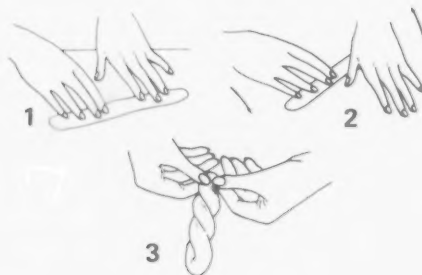
1. fills
2. cleans
3. clings to
4. liquefies in

Written Test

- _____ b. Doughs must be fully fermented, varying from _____, depending upon the recipe and the dough temperature.
1. 30 to 45 minutes
 2. 2 to 4 hours
 3. 1 to 2 hours
 4. 45 minutes to 1 hour
- _____ c. The dough must be placed on a frying screen and proofed at about _____.
1. 108°F
 2. 78°F
 3. 88°F
 4. 98°F
- _____ d. Frying doughs should never be allowed to become _____ during proofing.
1. doubled
 2. dried
 3. wet
 4. warm
9. Identify shaping operations for common fried products. Write the product names in the blanks.



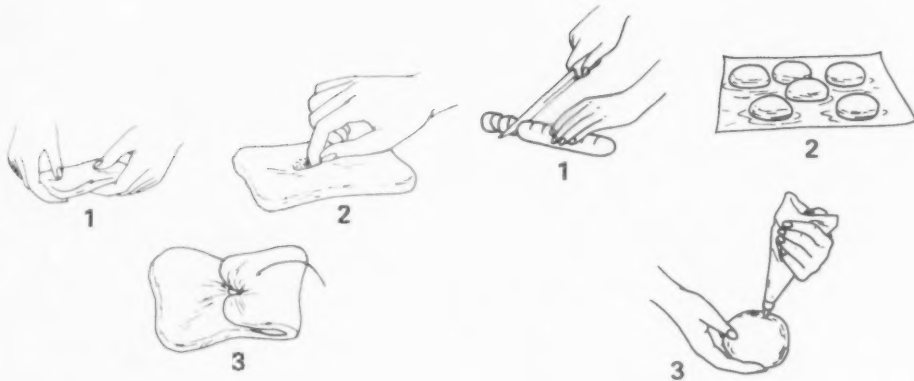
a. _____



b. _____

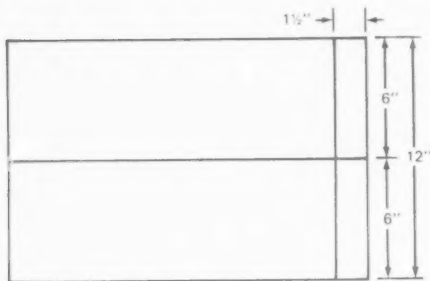
376

Written Test



c. _____

d. _____



e. _____

Written Test

10. Select from a list basic types of fillings and toppings for sweet yeast-dough products. Write an "X" in the blank before each correct topping or filling.

- _____ a. Jams and jellies
- _____ b. Cooked fruits
- _____ c. Whipped creams
- _____ d. Candies
- _____ e. Glazes and icings
- _____ f. Nuts

*Permission to duplicate this test is granted.

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**Sweet Yeast-Dough Products
Unit 8**

Unit Evaluation Form

Student Name _____ Unit Rating _____

Job Sheet 1—Prepare and Evaluate Basic Sweet Rolls Rating _____

Comments: _____

Job Sheet 2—Prepare and Evaluate Cinnamon Rolls Rating _____

Comments: _____

Job Sheet 3—Prepare Danish Pastry Rating _____

Comments: _____

Job Sheet 4—Prepare and Evaluate Raised Doughnuts Rating _____

Comments: _____

Job Sheet 5—Prepare and Evaluate a Glaze and Icing for Sweet
Yeast-Dough Products Rating _____

Comments: _____

Written Test Scores

Pretest _____ Posttest _____ Other _____

Other _____

Teacher Signature _____ Date _____

Student Signature _____ Date _____

*Permission to duplicate this form is granted.

Sweet Yeast-Dough Products Unit 8

Information Sheet

1. Terms and definitions

Note: Review terms from Unit 7, "Yeast Breads and Rolls."

- a. **Caramel** — A mixture of brown sugar, shortening, honey, and milk
- b. **Danish pastry dough** — A raised sweet yeast-dough that has additional butter, margarine, or shortening rolled into it to provide flakiness
- c. **Glaze** — Thin icing or syrup used to seal in moisture
- d. **Retard** — To slow down yeast action, usually by refrigerating or freezing
- e. **Sweet dough** — A raised sweet yeast-dough enriched with sugar and eggs

2. Types of sweet yeast-dough products

- a. **Cinnamon roll** — A sweet roll in which rolled dough is sprinkled with cinnamon and sugar, sliced, and often baked in a caramel syrup
- b. **Cockscorn (bear claw)** — A filled Danish pastry in which slits are spread to expose the filling
- c. **Coffeecake** — A sweet-dough product baked in a multiple-serving size and shaped in a variety of ways with various fillings and toppings
- d. **Crumb bun** — A sweet roll with a crumb topping
- e. **Diamond** — A Danish pastry shaped by folding two corners of a pastry square over a filling placed in the center of the square.
- f. **Filled round bun** — A sweet roll in which, before baking begins, a prepared filling is placed in an indentation made in the center of each roll
- g. **Pocket** — A Danish pastry shaped by folding all four corners of a pastry square to the center and placing a garnish where they meet
- h. **Turnover** — A triangular Danish pastry in which the filling is sealed inside the pastry covering

Information Sheet

3. Types of sweet doughs

- a. **Basic sweet dough** — A rich yeast dough with a high percentage of sugar, shortening, eggs, and milk
- b. **Danish dough** — Similar to basic sweet dough, but includes a production stage in which additional shortening is rolled into the dough to produce layers for a flaky product

Note: Danish dough is commonly referred to as *Danish pastry*. It is also known as *roll-in sweet dough*.

4. Production of basic sweet yeast-dough

Note: Basic sweet yeast-dough production consists of variations in the production stages of yeast-raised doughs discussed in Unit 7.

- a. Methods of combining ingredients are altered to prevent overmixing.
- b. Sweet yeast-doughs are slightly underfermented because the individual units proof faster.
- c. The make-up of individual units varies because of the varied fillings, shapes, toppings, and icings used.
- d. Sweet yeast-dough products should be fully proofed at 95°F to 98°F with relative humidity at 80 to 85 percent.
- e. Sweet yeast-dough products should be baked quickly but long enough to ensure thorough baking.
- f. With few exceptions, all sweet yeast-dough products should be glazed as they come from the oven.

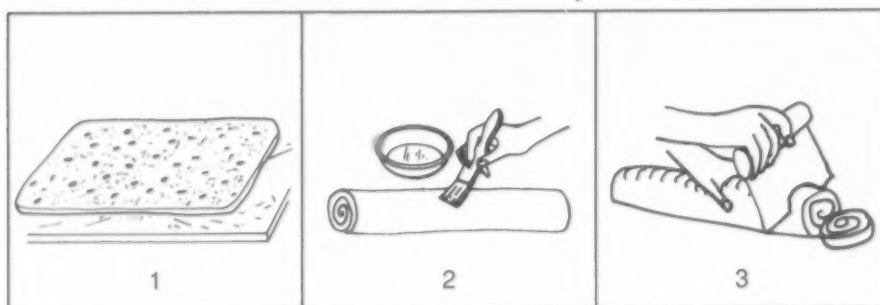
Note: Glazing seals the product, adding shelf life and enhancing the product's eating quality and appearance.

Information Sheet

5. Shaping operations for basic sweet rolls (Figures 1-5)

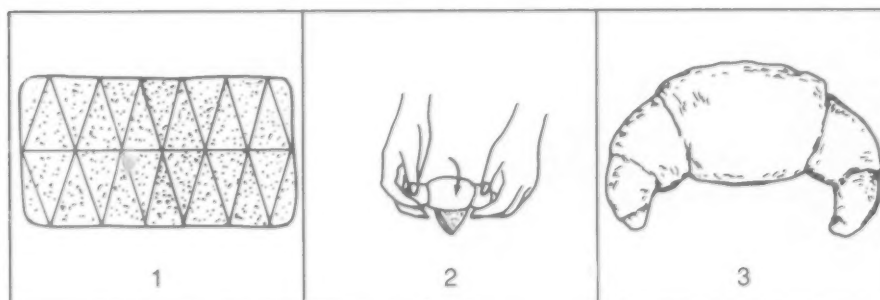
a. Cinnamon rolls

Figure 1



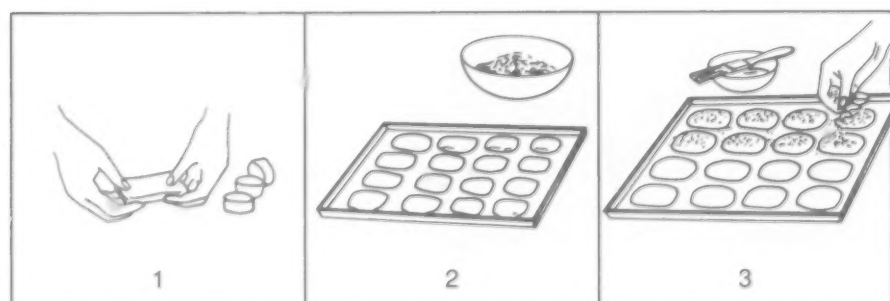
b. Crescent rolls or horns

Figure 2



c. Crumb rolls

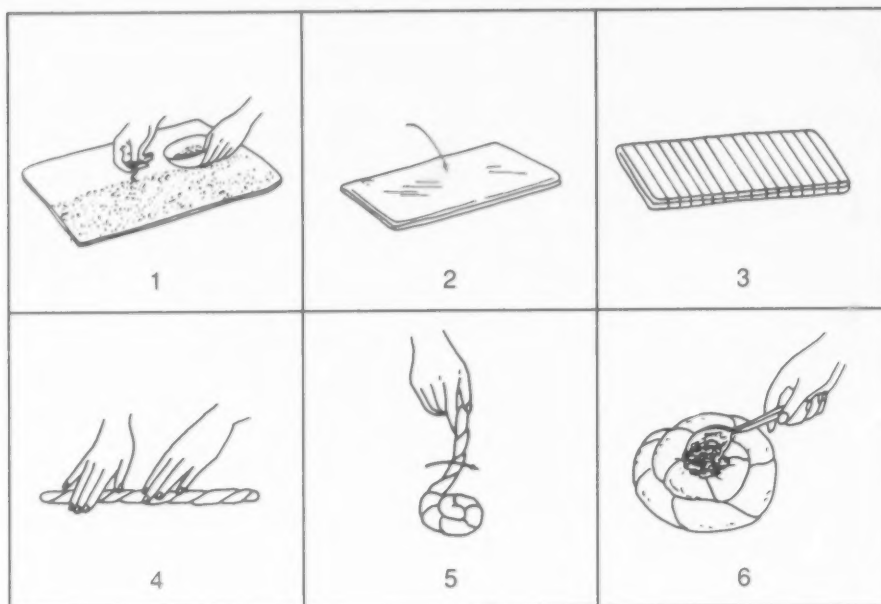
Figure 3



Information Sheet

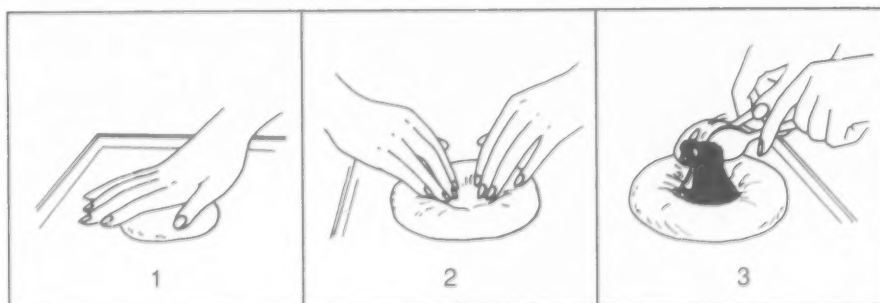
d. Snail-shaped filled buns

Figure 4



e. Round filled buns

Figure 5



Information Sheet

6. Danish pastry dough production

Note: Danish pastry dough production consists of variations in the production stages of basic sweet dough.

- a. Methods of combining ingredients are the same as for basic sweet dough, but mixing is stopped as soon as the ingredients are thoroughly blended.

Note: The dough is further developed during the rolling process.

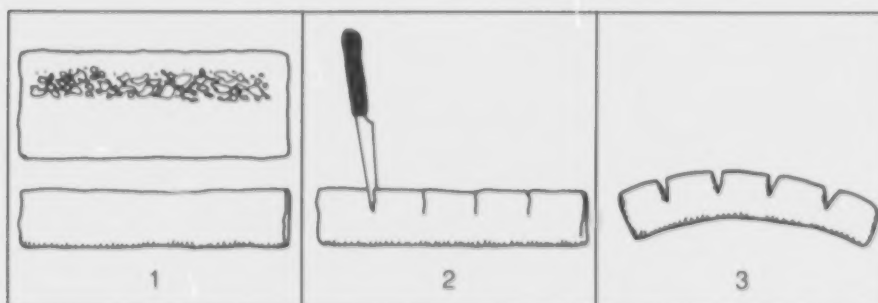
- b. The dough is scaled to appropriate size and then allowed to ferment for 15 to 20 minutes.
- c. Scaled dough is rolled, margarine or shortening dotted on the surface, and the dough rolled in the three-fold or four-fold method.
- d. Danish pastry products are proofed at 85°F to 90°F, with only enough relative humidity to prevent crusting.

Note: The proof temperature must not exceed the melting point of the rolled-in butter, margarine, or shortening.

7. Shaping operations for common Danish pastries (Figures 6-10)

- a. Cockscomb (bear claw)

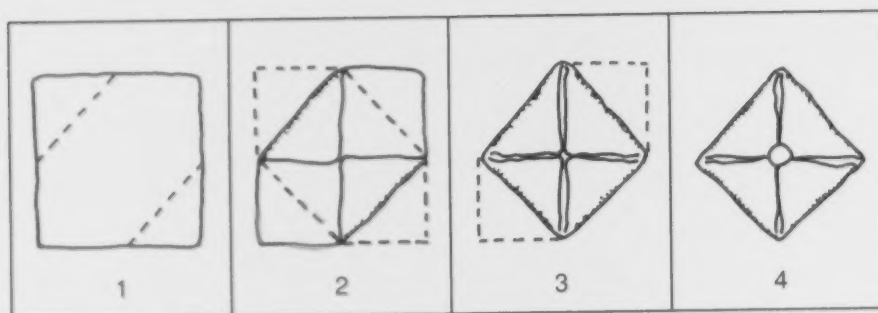
Figure 6



Information Sheet

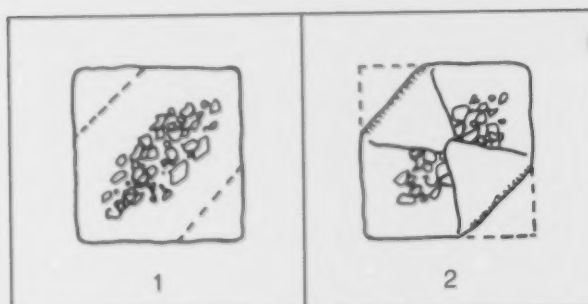
b. Pocket

Figure 7



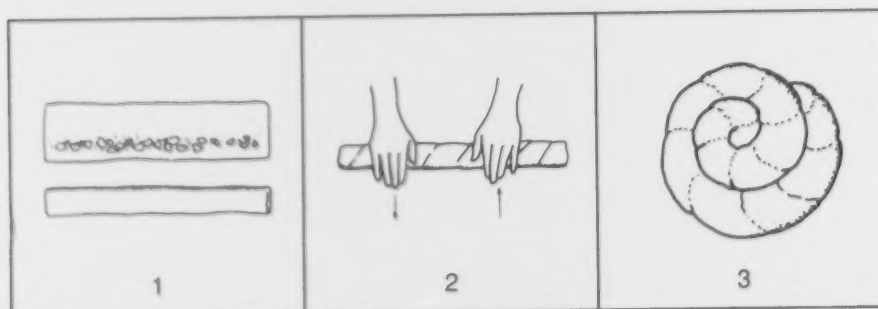
c. Diamond

Figure 8



d. Spiral coffeecake

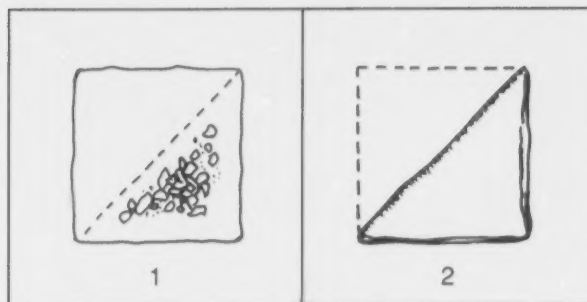
Figure 9



Information Sheet

- e. Turnover

Figure 10



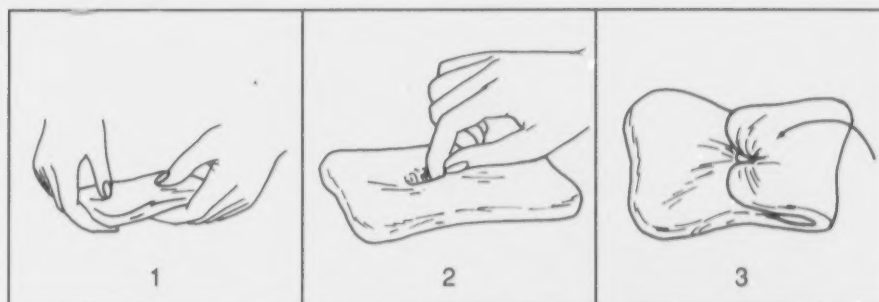
8. Production of doughnuts and other fried sweet-dough products

- a. As a general rule, best results are obtained by mixing fried sweet-dough until the dough cleans the mixing bowl.
- b. Doughs must be fully fermented, varying from 1 to 2 hours, depending upon the recipe and the dough temperature.
- c. The dough must be placed on a frying screen and proofed at a temperature of about 98°F.
- d. Frying doughs should never be allowed to become wet during proofing.

9. Shaping operations for common fried sweet-dough products (Figures 11-15)

- a. Bow tie

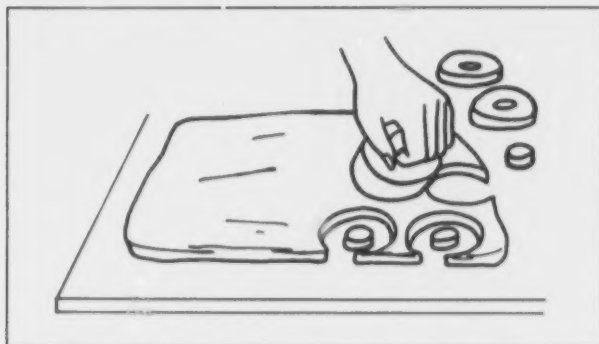
Figure 11



Information Sheet

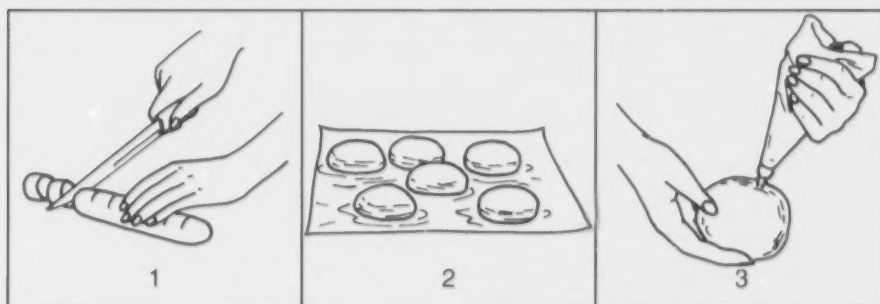
- b. Doughnut

Figure 12



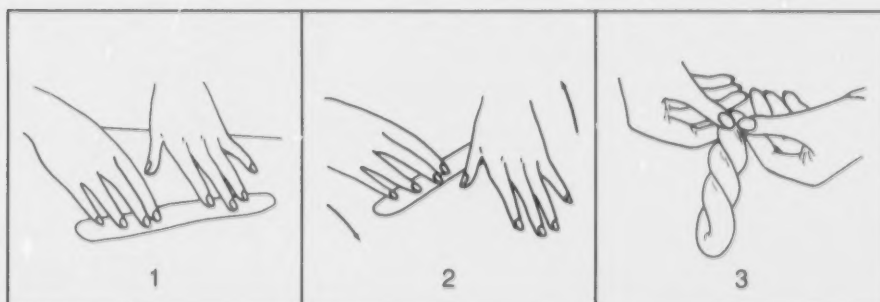
- c. Jelly-filled doughnut

Figure 13



- d. Twist

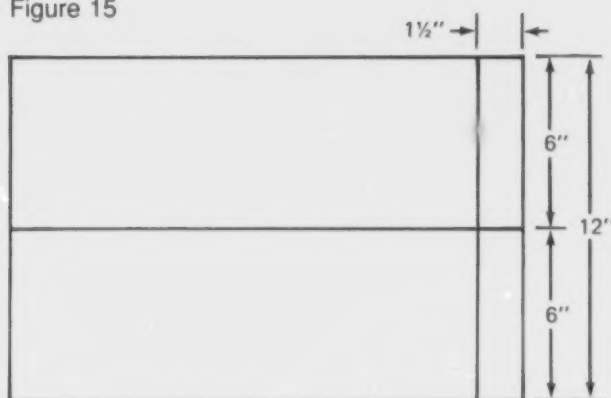
Figure 14



Information Sheet

- e. Long John

Figure 15



10. Basic types of fillings and toppings for sweet yeast-dough products

- a. Jams and jellies
- b. Cooked fruits
- c. Glazes and icings
- d. Whipped creams
- e. Candies
- f. Nuts

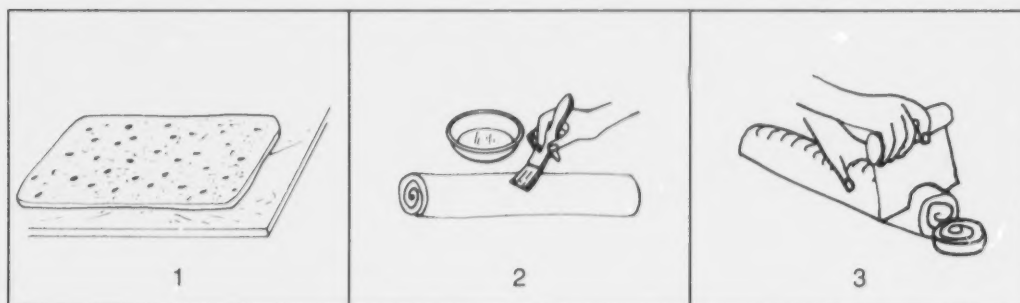
Sweet Yeast-Dough Products Unit 8

Student Supplement 1—Identify Shaping Operations for Basic Sweet Rolls

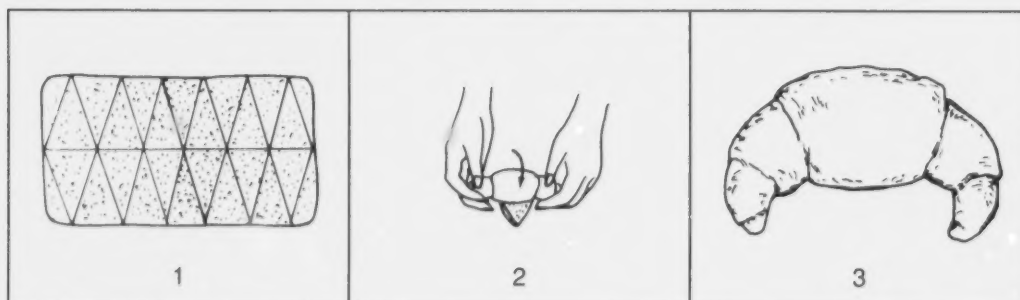
Name _____

Each set of the following drawings illustrates the shaping operations used to bake a basic sweet roll. Identify each shaping operation below. Check your answers against Information Sheet, Objective 5.

1. _____

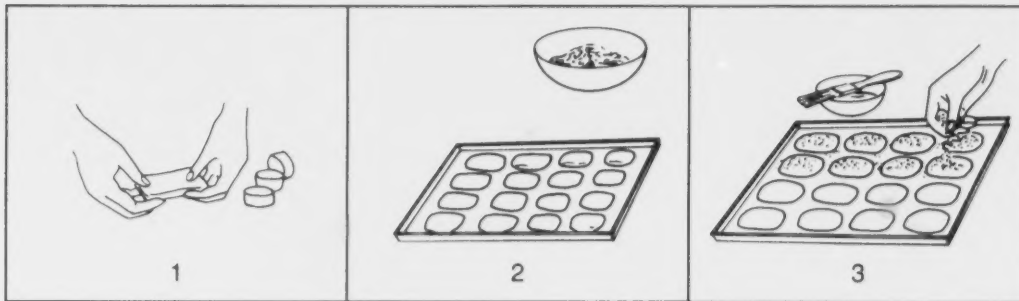


2. _____

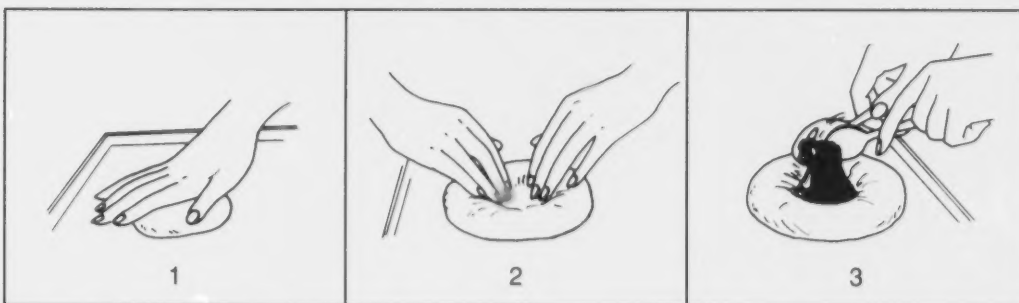


Student Supplement 1

3. _____

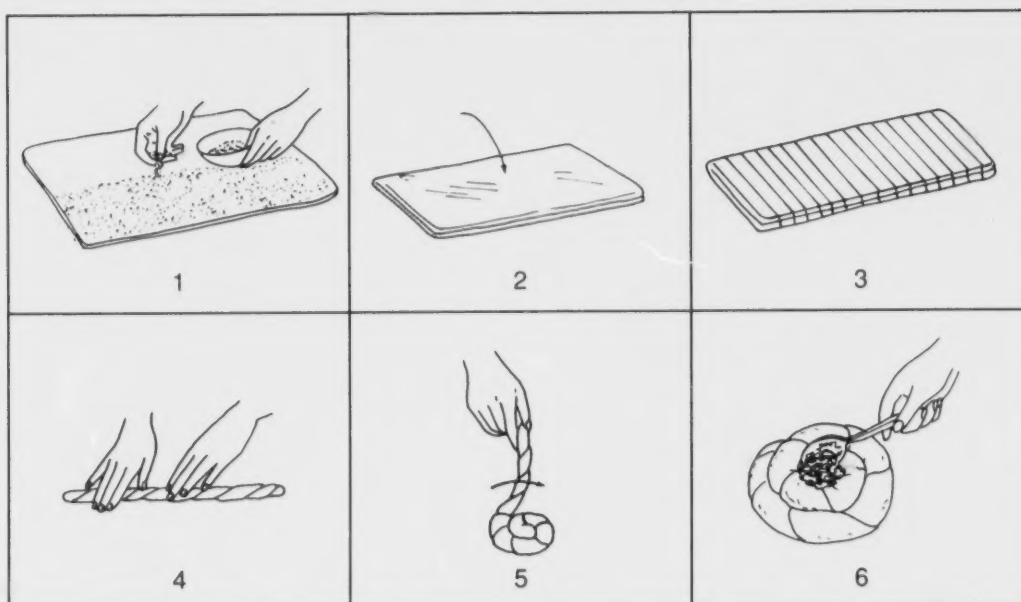


4. _____



Student Supplement 1

5. _____



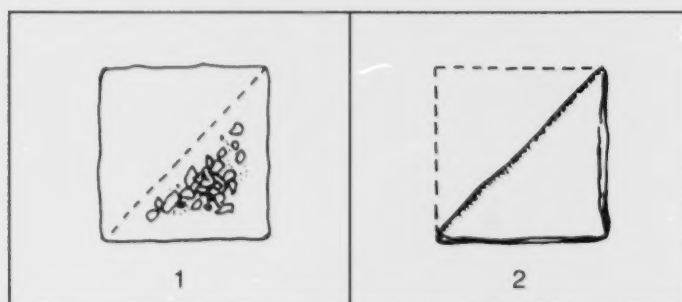
Sweet Yeast-Dough Products **Unit 8**

Student Supplement 2—Identify Shaping Operations for Common Danish Pastries

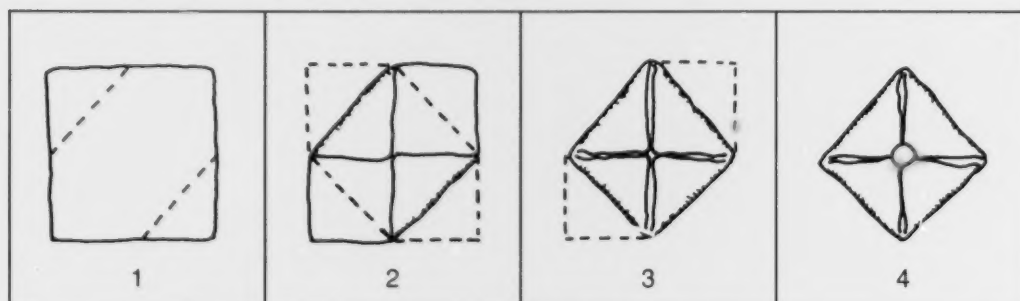
Name _____

Each set of the following drawings illustrates the shaping operations used to make a Danish pastry. Identify each shaping operation below. Check your answers against Information Sheet, Objective 7.

1. _____

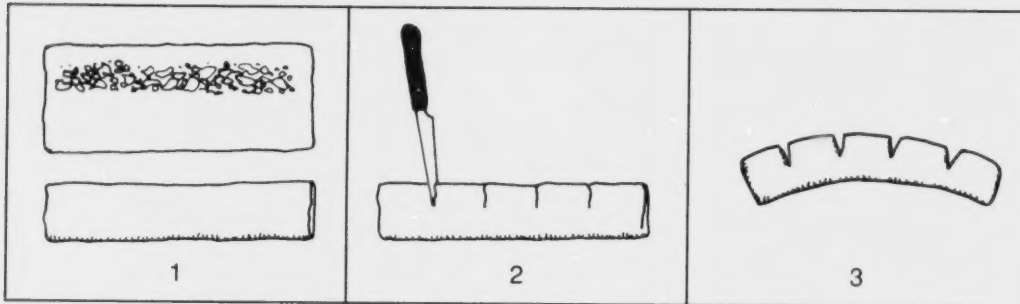


2. _____

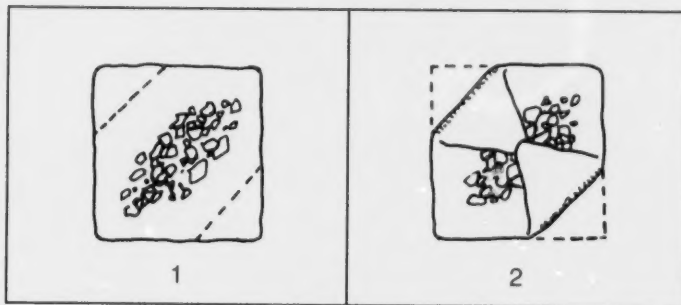


Student Supplement 2

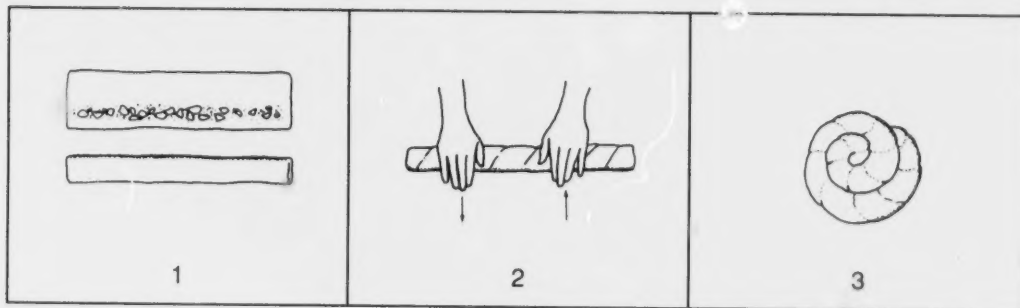
3. _____



4. _____



5. _____



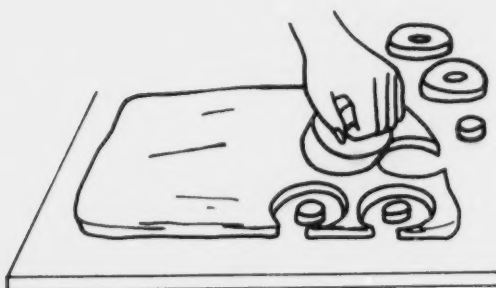
Sweet Yeast-Dough Products **Unit 8**

Student Supplement 3—Identify Shaping Operations for Common Fried Products

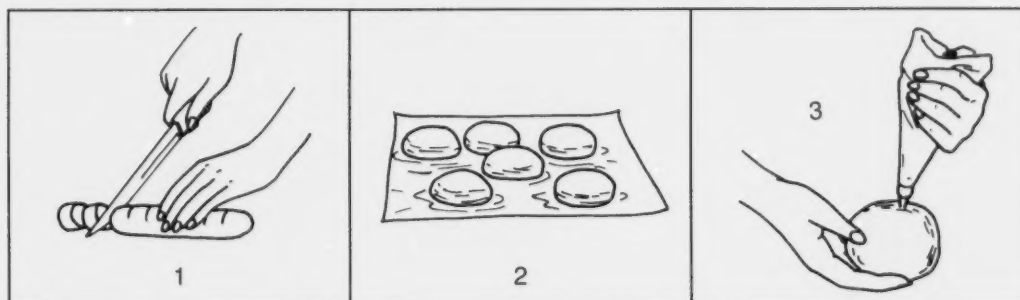
Name _____

Each set of the following drawings illustrates the shaping operations used to make fried products. Identify each shaping operation below. Check your answers against Information Sheet, Objective 9.

1. _____

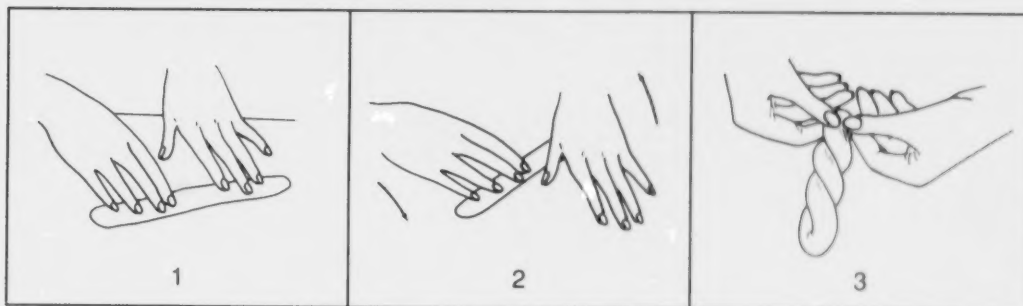


2. _____

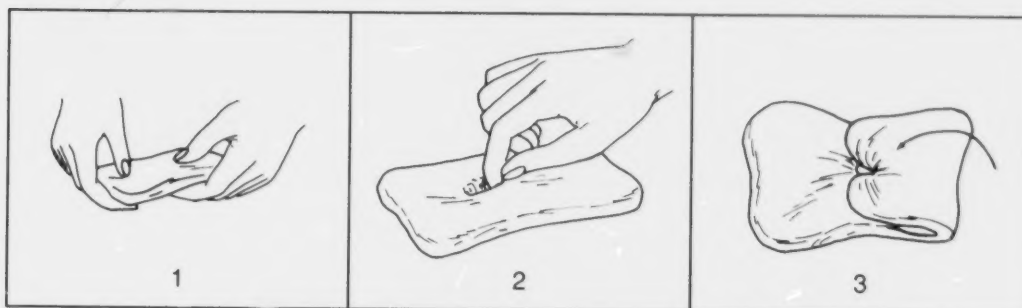


Student Supplement 3

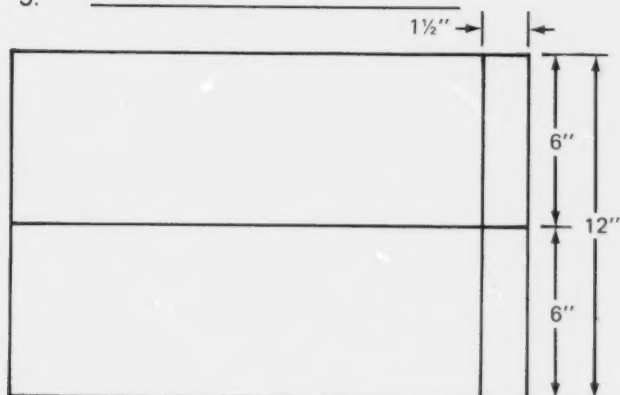
3. _____



4. _____



5. _____



Sweet Yeast-Dough Products Unit 8

Job Sheet 1—Prepare and Evaluate Basic Sweet Rolls

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Mixer
Dough hook
Proof box
Oven

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 1

Name: Basic Sweet Rolls		
Yield: 8 dozen		Portion: 2 oz. roll
Utensils: Baker's scale, mixing bowl, measuring utensils, rolling pin, dough cutter		
Ingredients	Quantity	Method
Milk, scalded	3 c.	1. Combine milk, sugar, shortening, and salt in mixer bowl; mix to blend.
Sugar	1 lb.	2. Cool to lukewarm.
Shortening	1 lb.	3. Add eggs. Mix to blend.
Salt	2 oz.	4. Soften yeast in warm water.
Eggs, beaten	9	5. Add to milk mixture. Mix at medium speed until blended.
Yeast, active dry	2 oz.	6. Add flour gradually at low speed; mix at medium speed 5 to 6 minutes to a smooth dough.
Water, warm (110°F)	1½ c.	Note: Do not overmix. The dough should be moderately soft, and the dough temperature just after mixing should be 78°F to 82°F.
Flour	5-6 lb.	7. Place in lightly greased bowl, grease top of dough, cover, and let rise in warm place until double in bulk.
		8. Punch down and let rise again, about 1 hour.
		9. Punch down and divide into portions for rolls.
		10. Let rest 10 minutes. Scale about 2 oz. per roll.
		11. Shape and let rise until rolls are almost double in bulk.
		12. Bake at 375°F, 20 to 25 minutes.
		13. Glaze and ice after removing from oven. (See Job Sheet 5.)
Note: For quicker rising, dough, increase yeast to 3 oz. dry or 6 oz. compressed.		

- ☐ 3. Evaluate the basic sweet rolls.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Job Sheet 1

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Uniform browning Smooth Free of cracks and bulges				
Flavor	Well-blended flavor of ingredients No sourness or yeast taste				
Texture	Tender, elastic crumb Free of dryness or doughiness				
Volume	Lightweight in proportion to size				
Uniformity	Well-proportioned, evenly rounded top				

Total Points _____

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.

Job Sheet 1

- ☐ 6. Clean the work area.

Evaluator's comments: _____

Sweet Yeast-Dough Products
Unit 8

Job Sheet 2—Prepare and Evaluate Cinnamon Rolls

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment—Oven

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 2

Name: Cinnamon Rolls		
Yield: 8 dozen		Portion: 1½ oz. roll
Utensils: Baker's scale, measuring utensils, rolling pin, pastry brush, mixing bowl, mixing spoon, dough cutter, baking sheets (18" × 26" × 1")		
Ingredients	Quantity	Method
Basic sweet roll dough (raised and ready for shaping) See Job Sheet 1.	10 lb.	1. Scale dough into 8 portions about 1 lb. 4 oz. each.
Butter or margarine, melted	12 oz.	2. Roll each portion into a rectangular strip 9" × 14" × ⅓"
Sugar	2 lb.	3. Mix sugar and cinnamon.
Cinnamon	3 T.	4. Spread each strip with butter; sprinkle with 4 oz. of sugar/cinnamon mix.
		5. Roll into cylinder; cut into 1-in. slices.
		6. Place cut side down on greased baking sheets (2 doz. rolls, 1½ oz. each, per baking sheet.)
		7. Let rise until doubled in bulk, about 45 minutes.
		8. Bake at 375°F, 20 to 25 minutes.
		9. After removing from oven, spread tops with glaze. (See Job Sheet 5.)

- ☐ 3. Evaluate the cinnamon rolls.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Job Sheet 2

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Uniform browning Smooth Free of cracks and bulges				
Flavor	Well-blended flavor of ingredients No sourness or yeast taste				
Texture	Tender, elastic crumb Free of dryness or doughiness				
Volume	Lightweight in proportion to size				
Uniformity	Well-proportioned, evenly rounded top				

Total Points _____

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.

Job Sheet 2

- ☐ 6. Clean the work area.

Evaluator's comments: _____

Sweet Yeast-Dough Products Unit 8

Job Sheet 3—Prepare Danish Pastry Dough

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to instructions	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Rolling pin
Baking pans
Parchment paper
Fillings and toppings as desired
Recipe for basic sweet roll dough
Butter or margarine, 1½ pounds

Note: Use special Danish pastry shortening if available.

B. Procedure

- ☐ 1. Scale basic sweet roll dough into four 2½-pound portions.

Note: You will work with one portion at a time; other portions should be refrigerated.

- ☐ 2. Roll the dough portion into a rectangular shape about ¼ in. thick. (Figure 1)

Figure 1

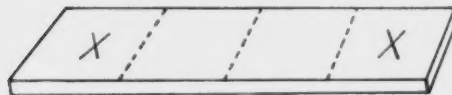


Job Sheet 3

- ☐ 3. Completely cover one-quarter of the dough at each end with small pieces of butter or margarine. (Figure 2)

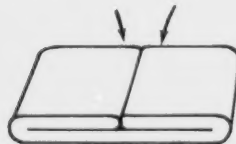
Note: Use approximately 3 ounces of butter or margarine to each quarter.

Figure 2



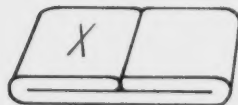
- ☐ 4. Fold the buttered quarters over from each end to meet in the center of the unbuttered portions. (Figure 3)

Figure 3



- ☐ 5. Cover one-half of this surface with small pieces of butter or margarine. (Figure 4)

Figure 4



Job Sheet 3

- ☐ 6. Fold the two halves together as shown in Figure 5, ending up with four layers of dough with butter or margarine between each layer.

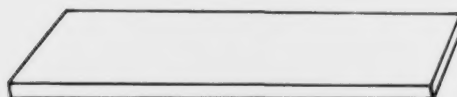
Note: This process is referred to as the four-fold process.

Figure 5



- ☐ 7. Place the layered dough portion in the refrigerator to rest while working with other three portions.
- ☐ 8. Complete steps 1 through 7 with each remaining portion of dough.
- ☐ 9. Remove the first folded portion from the refrigerator.
- ☐ 10. Roll the dough to a rectangular shape approximately $\frac{1}{4}$ inch thick. (Figure 6)

Figure 6



- ☐ 11. Fold one-third portion of the dough over an equal portion of the dough from each end as shown in Figure 7.

Figure 7



Job Sheet 3

- ☐ 12. Repeat this rolling and folding process with each portion two times each allowing the dough to rest approximately 30 minutes between each process.

Note: After each portion has been prepared in this manner, individual pastries may be formed as desired.

- ☐ 13. Shape and bake individual Danish pastries according to your instructor's directions.
- ☐ 14. Clean utensils, and return unused ingredients to proper storage.
- ☐ 15. Clean the work area.

Evaluator's comments: _____

Sweet Yeast-Dough Products Unit 8

Job Sheet 4—Prepare and Evaluate Raised Doughnuts

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Mixer
Dough hook
Doughnut or deep-fat fryer

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 4

Name: Raised Doughnuts		
Yield: 15 dozen		Portion: 1 oz. each
Utensils: Baker's scale, mixing bowl, measuring utensils, rolling pin, doughnut cutter, fryer screens		
Ingredients	Quantity	Method
Water, 85°F to 90°F	½ gal.	1. Add yeast to water, allow to soften for 10 minutes, and stir to mix.
Yeast, active dry	4 oz.	2. Add eggs, sugar, dry milk, shortening, salt, and vanilla to mixer bowl and cream together until well blended.
Eggs, fresh	1 lb.	Note: Do not whip.
Dry milk	12 oz.	3. Add water and yeast to mixing bowl.
Shortening	4 oz.	4. Add flour gradually; mix until well blended only.
Salt	1½ lb.	5. Divide into 4 equal portions and allow to ferment fully.
Vanilla	2 oz.	6. Roll dough and cut with doughnut cutter.
Flour	½ oz.	7. Place on fryer screens and proof fully.
	7 lbs.	8. Fry according to doughnut fryer instructions or at 375°F in deep-fat fryer for approximately 1½ minutes, turning once.
		9. Glaze while hot or ice, if preferred, when cool.

- ☐ 3. Evaluate the raised doughnuts.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Job Sheet 4

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Uniform browning Smooth Free of cracks and bulges				
Flavor	Well-blended flavor of ingredients No sourness or yeast taste				
Texture	Tender, elastic crumb Free of dryness or doughiness				
Volume	Lightweight in proportion to size				
Uniformity	Well-proportioned, evenly rounded top				

Total Points _____

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.

Job Sheet 4

- ☐ 6. Clean the work area.

Evaluator's comments: _____

Sweet Yeast-Dough Products Unit 8

Job Sheet 5—Prepare and Evaluate a Glaze and Icing for Sweet Yeast-Dough Products

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment—Range

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 5

Name: Glaze and Icing		
Yield: 1 gallon		Portion: As needed
Utensils: Baker's scale, mixing bowl, wire whip, icing spatula, sheet pan, cooling racks		
Ingredients	Quantity	Method
<u>Glaze</u> Light corn syrup Water	3 lbs. 1 lb.	<u>Glaze</u> 1. Heat corn syrup and water to boiling. 2. Glaze hot sweet yeast products.
<u>Icing</u> Powdered sugar Light corn syrup Salt Vanilla Hot tap water (variable 140°F)	5 lbs. 8 oz. ¼ oz. ½ oz. 8 oz.	<u>Icing</u> 1. Place sugar, corn syrup, salt, and vanilla in bowl. 2. Add water gradually, beating until smooth. 3. Beat in additional water to obtain desired spreading consistency. 4. Cool before icing.
Note: Doughnut glaze should have a thin consistency.		

- ☐ 3. Evaluate the glaze or icing.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, then total all points.

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Consistency	Smooth, nongranular, shiny				
Flavor	Sweet, nonsalty				
Spreadability	Glaze: Free-flowing liquid Icing: Easily spread, loses spatula marks				

Total Points _____

Scoring

- 21-25 points — Servable; good technique
 16-20 points — Check technique; serve with improvement in mind
 10-15 points — Check technique; do not serve

Job Sheet 5

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.

- ☐ 6. Clean the work area.

Evaluator's comments: _____

Quick Breads Unit 9

Objective Sheet

Unit Objective

After completing this unit, the student should be able to prepare and evaluate quick breads. The student should demonstrate competency by completing the job sheets and scoring a minimum of 85 percent on the written test.

Specific Objectives

After completing this unit, the student should be able to:

1. Match terms related to quick breads with their definitions.
2. Match quick bread classifications with their dough or batter types.
3. List two types of leavening agents.
4. Complete statements about quality standards for biscuits.
5. Complete statements about quality standards for muffins.
6. Complete statements about quality standards for cornmeal muffins and cornbread.
7. List finishes for quick breads.
8. Prepare and evaluate plain muffins. (Job Sheet 1)
9. Prepare and evaluate baking powder biscuits. (Job Sheet 2)
10. Prepare and evaluate cornbread. (Job Sheet 3)
11. Prepare and evaluate banana nut bread. (Job Sheet 4)
12. Prepare and evaluate cake doughnuts. (Job Sheet 5)

Quick Breads Unit 9

Suggested Activities

Instructional Plan

1. Read the unit carefully and plan for instruction. Study the specific objectives to determine the order in which you will present them.
2. Review teaching suggestions below, and plan classroom activities. Integrate workplace skills as they apply to your vocational program.
3. Plan your presentation to take advantage of student learning styles and to accommodate special needs students.
4. Obtain films, videotapes, posters, charts, and other items to supplement instruction of this unit. See ordering information in the "Suggested Supplemental Resources" section.
5. Review instructions for evaluating student performance and make copies of the Unit Evaluation Form.
6. Provide students with the unit of instruction.
7. Discuss and demonstrate the job sheets, and review the evaluation criteria for each. Schedule performance dates.
8. Discuss the use of the Unit Evaluation Form with the students, and select and discuss the rating scale that will be used for student evaluation.
9. Give written test.
10. Compile job sheet ratings and written test scores on the Unit Evaluation Form.
11. Reteach and retest as required.

Suggested Activities

Teaching Suggestions

Note: Skill areas appearing in boldface type in the Teaching Suggestions refer to the academic and workplace skills identified by the American Society for Training and Development (ASTD) and the U.S. Department of Labor. These have been adapted by MAVCC.

1. Show films on quick bread production. Skill area: **listening**
2. Demonstrate and discuss quick bread mixing methods. Skill area: **listening**

Resources Used in Developing This Unit

1. Amendola, Joseph. *The Baker's Manual for Quantity Baking and Pastry Making*, 3rd ed. Jenks, OK: Williams Book Company.
2. Amendola, Joseph and D. Lundberg. *Understanding Baking*. Boston: CBI Publishing Company.
3. *Baking Handbook for the School Food Service Program*. Minneapolis, MN: General Mills.
4. Sultan, William J. *Elementary Baking*. New York: McGraw-Hill Book Company.
5. Shugart, Grace and Mary Molt. *Food for Fifty*, 8th ed. New York: Macmillan, 1989.

Suggested Supplemental Resources

Order films on quick bread preparation from:

Prentice-Hall Media
ServCode BF
150 White Plains Road
Tarrytown, NY 10591

Suggested Activities

Instructions For Evaluating Student Performance

When the student is ready to perform a specific task, obtain a copy of the job sheet which may be found in either the teacher or student edition. Then observe the student performing the procedure.

Process evaluation—Place a mark in the box to the left of each designated checkpoint if the student has satisfactorily achieved the step(s) for each checkpoint area. If the student is unable to correctly complete the procedure, have the student review the materials and try again.

Product evaluation—Once the student has satisfactorily completed the procedure, rate the student product (outcome) using the criteria which have been provided as part of the job sheet. If the student's product is unacceptable, have the student review the materials and submit another product for evaluation.

Sample performance evaluation keys have been provided below. Many other keys are available. Select one rating (grading scale) which best fits your program needs.

Option A

- 4 - Skilled—Can perform job with no additional training.
- 3 - Moderately skilled—Has performed job during training program; limited additional training may be required.
- 2 - Limited skill—Has performed job during training program; additional training is required to develop skill.
- 1 - Unskilled—Is familiar with process, but is unable to perform job.

Option B

- Yes—Can perform job with no additional training.
- No—Is unable to perform job satisfactorily.

Quick Breads Unit 9

Answers to Written Test

- | | | | | | | |
|----|----|---|----|----|----|---|
| 1. | a. | 4 | e. | 3 | h. | 8 |
| | b. | 1 | f. | 10 | i. | 2 |
| | c. | 7 | g. | 6 | j. | 5 |
| | d. | 9 | | | | |
-
- | | | |
|----|----|---|
| 2. | a. | 2 |
| | b. | 1 |
| | c. | 2 |
| | d. | 1 |
-
- | | | |
|----|----|---------------|
| 3. | a. | Baking powder |
| | b. | Baking soda |
| | c. | Steam |
-
- | | | |
|----|----|--------------|
| 4. | a. | Straight |
| | b. | Twice |
| | c. | Flour |
| | d. | Thin |
| | e. | Moist |
| | f. | Brown |
| | g. | Bitterness |
| | h. | Well-rounded |
-
- | | | |
|----|----|------------------|
| 5. | a. | Peaks and cracks |
| | b. | Brown |
| | c. | Pebbly |
| | d. | Tunnels |
| | e. | Bitterness |
-
- | | | |
|----|----|----------------|
| 6. | a. | Rim |
| | b. | Size |
| | c. | Brown |
| | d. | Cracked; rough |
| | e. | Pale |
| | f. | Open |
| | g. | Crisp |
| | h. | Rancid |
-
- | | | |
|----|----|--------------|
| 7. | a. | Icings |
| | b. | Washes |
| | c. | Syrup glazes |
| | d. | Dry coatings |

Quick Breads
Unit 9

Written Test

Name _____

Score _____

1. Match terms related to quick breads with their definitions. Write the correct numbers in the blanks.

- | | | |
|----------|---|----------------------|
| _____ a. | An unbaked mixture of ingredients that is thin enough to be scooped, spooned, or poured | 1. Biscuits |
| _____ b. | Small round individual quick breads often made with baking powder as a source of leavening | 2. Popovers |
| _____ c. | The degree of density of a mixture or its thickness or thinness | 3. Cut in |
| _____ d. | Method of mixing fat and sugar that adds air to the mixture and helps make the product light and fluffy | 4. Batter |
| _____ e. | To distribute shortening into dry ingredients in small particles by using a chopping motion | 5. Quick breads |
| _____ f. | A quick bread that is baked in a loaf pan | 6. Muffins |
| _____ g. | Small individual quick breads made from a batter and baked in a cup-shaped pan | 7. Consistency |
| _____ h. | A mixing method in which shortening is cut into the dry ingredients to help make the product flaky | 8. Pastry method |
| _____ i. | Puffed up individual quick breads that are leavened primarily by the natural action of steam | 9. Creaming |
| _____ j. | Varieties of bread products that are simple and quick to prepare, and that do not use yeast as a source of leavening action | 10. Loaf quick bread |

Written Test

2. Match quick bread classifications with their dough or batter types. Write the correct numbers in the blanks. Numbers will be used more than once.

- | | |
|----------------------|-------------------|
| _____ a. Stiff dough | 1. Soft batter |
| _____ b. Pour batter | 2. Roll-out dough |
| _____ c. Soft dough | |
| _____ d. Drop batter | |

3. List types of leavening agents.

Chemical

- a. _____
- b. _____

Natural

- c. _____

4. Complete statements about quality standards for biscuits. Circle the correct word(s).

- a. Uniform in size with (straight, slightly curved) sides
- b. (Twice, Three-times) the size of unbaked biscuits
- c. Tender, moderately smooth crust free of excess (flour, sugar)
- d. Flaky grain with medium-fine and even cells; pulls apart in (thick, thin) sheets
- e. Tender internal texture, slightly (dry, moist) and light
- f. Tops and bottoms free of yellow or (tan, brown) spots
- g. Pleasing flavor with no (buttery aftertaste, bitterness)
- h. Golden brown (flat-topped, well-rounded) shape

Written Test

5. Complete statements about quality standards for muffins and breads. Circle the correct word(s).
- a. Uniform well-rounded top, free of (peaks and cracks, crumbs and pebbly grain)
 - b. Uniform golden (yellow, brown) color
 - c. Tender crust that is (pebbly, smooth) or slightly rough and shiny
 - d. Tender, moist, and light internal texture; round even cells free of (air, tunnels)
 - e. Pleasing flavor with no (bitterness, sweetness)
6. Complete statements about quality standards for cornmeal muffins and cornbread. Circle the correct word(s).
- a. Uniform shape, no peaks, medium (rim, center indentation), with slightly rounded top for muffins
 - b. Uniform (size, mixing) for types being made
 - c. Uniform golden (brown, yellow) color
 - d. Slightly (cracked, pebbled) and medium (rough, smooth) crust
 - e. Internal (deep, pale) yellow color without large pieces of cornmeal
 - f. Round, even cells with slightly (open, closed) grain
 - g. (Soft, Crisp), and tender
 - h. Pleasing corn flavor, not (buttery, rancid)
7. List the four types of finishes for quick breads.
- a. _____
 - b. _____
 - c. _____
 - d. _____

*Permission to duplicate this test is granted.

**Quick Breads
Unit 9**

Unit Evaluation Form

Student Name _____ Unit Rating _____

Job Sheet 1—Prepare and Evaluate Plain Muffins Rating _____

Comments: _____

Job Sheet 2—Prepare and Evaluate Baking Powder Biscuits Rating _____

Comments: _____

Job Sheet 3—Prepare and Evaluate Cornbread Rating _____

Comments: _____

Job Sheet 4—Prepare and Evaluate Banana Nut Bread Rating _____

Comments: _____

Job Sheet 5—Prepare and Evaluate Cake Doughnuts Rating _____

Comments: _____

Written Test Scores

Pretest _____ Posttest _____ Other _____

Other _____

Teacher Signature _____ Date _____

Student Signature _____ Date _____

*Permission to duplicate this form is granted.

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Quick Breads Unit 9

Information Sheet

1. Terms and definitions

- a. **Batter** — An unbaked mixture of ingredients that is thin enough to be scooped, spooned, or poured
- b. **Biscuits** — Small round individual quick breads often made with baking powder as a source of leavening
- c. **Consistency** — The degree of density of a mixture or its thickness or thinness
- d. **Creaming** — Method of mixing fat and sugar that adds air to the mixture and helps make the product light and fluffy
- e. **Cut in** — To distribute shortening into dry ingredients in small particles by using a chopping motion

Note: A pastry blade or pastry knife attachment for the mixer may be used.

- f. **Loaf quick bread** — A quick bread that is baked in a loaf pan
- g. **Muffins** — Small individual quick breads made from a batter and baked in a cup-shaped pan
- h. **Pastry method** — A mixing method in which shortening is cut into the dry ingredients to help make the product flaky
- i. **Popovers** — Puffed up individual quick breads that are leavened primarily by the natural action of steam
- j. **Quick breads** — Varieties of bread products that are simple and quick to prepare, and that do not use yeast as a source of leavening action

2. Quick bread classifications

- a. Soft batter
 - Pour batter
 - Drop batter
- b. Roll-out dough
 - Stiff dough
 - Soft dough

Information Sheet

3. Types of leavening agents

a. Chemical

- Baking powder
- Baking soda

Note: If baking powder is used, mixing must be limited because it will destroy the carbon dioxide in the baking powder and prevent the product from rising.

b. Natural—Steam

Examples: Popovers and Yorkshire pudding

4. Biscuit quality standards

- a. Uniform in size with straight sides
- b. Twice the size of unbaked biscuits
- c. Golden brown, well-rounded shape
- d. Tops and bottoms free of yellow or brown spots
- e. Tender, moderately smooth crust free of excess flour
- f. Flaky grain with medium-fine and even cells; pulls apart in thin sheets
- g. Tender internal texture, slightly moist and light
- h. Pleasing flavor with no bitterness

5. Quality standards for muffins and breads

- a. Uniform well-rounded top, free of peaks and cracks; large in proportion to weight
- b. Uniform golden brown color
- c. Tender crust that is pebbly or slightly rough and shiny
- d. Tender, moist, and light internal texture; round even cells free of tunnels
- e. Pleasing flavor with no bitterness

Information Sheet

6. Quality standards for cornmeal muffins and cornbread

- a. Uniform shape, no peaks, medium rim with slightly rounded top for muffins
- b. Uniform size for types being made
Examples: Muffins, sticks, loaves
- c. Uniform golden brown color
- d. Slightly cracked and medium rough crust
- e. Internal pale yellow color without large pieces of cornmeal
- f. Round, even cells with slightly open grain
- g. Crisp, tender, and slightly open texture
- h. Pleasing corn flavor, not rancid

7. Types of quick bread finishes

- a. Icings

Note: These finishes usually flow and are spread over doughnuts, sweet rolls, and coffeecakes.

- b. Washes

Note: These finishes are used to wash off excess flour and to help with browning. They are also used as a base to hold fruits or nuts.

- c. Syrup glazes

Note: These finishes used on sweet rolls and coffeecakes, are very thin so that the excess will run off.

- d. Dry coatings

Note: These finishes, used on cake doughnuts, involve the application of powdered or granulated sugars on doughnuts that have drained well but are still slightly warm.

**Quick Breads
Unit 9****Job Sheet 1—Prepare and Evaluate Plain Muffins**

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Mixer
Oven

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 1

Name: Plain Muffins		
Yield: 5 dozen		Portion: One muffin
Utensils: Mixing bowl, flat beater, spatula, measuring utensils, muffin tin		
Ingredients	Quantity	Method
Flour	2 lb. 8 oz.	1. Combine dry ingredients in mixing bowl.
Baking powder	2 oz.	2. Blend, using flat beater, on low speed.
Salt	1 T.	3. Combine eggs, milk, and shortening.
Sugar	6 oz.	4. Add to dry ingredients and mix only to blend at low speed about 15 seconds.
Eggs, beaten	4	
Milk	1½ qt.	Note Batter will be lumpy.
Shortening, melted, cooled	8 oz	5. Measure with No. 20 disher into well-greased muffing pans, about two-thirds full.
		Note: Batter should be dished all at once with as little handling as possible, but may be refrigerated a short time and baked as needed.
		6. Bake at 400°F for 25 minutes.
Notes: - No. 24 disher will yield 6½ dozen muffins. - Paper liners may be used.		

- ☐ 3. Evaluate the plain muffins.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, then total all points.

Job Sheet 1

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Golden brown, well rounded top, free of peaks and cracks				
Flavor	Pleasing flavor Characteristic of kind with no bitterness				
Texture	Round, even cells, free of tunnels Tender, moist, and light				
Crust	Tender, pebbly, or slightly rough and shiny				
Uniformity	Same size and shape Large in proportion to weight				

Total Points _____

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

Job Sheet 1

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.
- ☐ 6. Clean the work area.

Evaluator's comments: _____

**Quick Breads
Unit 9****Job Sheet 2—Prepare and Evaluate Baking Powder Biscuits**

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Mixer
Oven

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 2

Name: Baking Powder Biscuits		
Yield: 100 biscuits		Portion: Two 2½-inch biscuits
Utensils: Mixing bowl, dough hook, spatula, measuring utensils, baking pans, biscuit cutter, rolling pin, baker's scale		
Ingredients	Quantity	Method
Flour Baking powder Salt Shortening Milk	5 lb. 5 oz. 2 T. 1 lb. 4 oz. 1¾ to 2 qt.	1. Mix dry ingredients at low speed. 2. Add fat 3. Mix at low speed until crumbly. 4. Add milk. 5. Mix at low speed to form a soft dough. Note: Do not overmix. dough should be as soft as can be handled. 6. Place one-half of dough on lightly floured board or table; knead lightly 15 to 20 times. 7. Roll to ¾-inch thickness; cut with biscuit cutter. 8. Place on baking sheet ½ inch apart for crusty biscuits, just touching for softer biscuits. 9. Repeat, using remaining dough. Note: Biscuits may be held several hours in the refrigerator until time to bake. 10. Bake at 425°F for 15 minutes.

- ☐ 3. Evaluate the baking powder biscuits.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, then total all points.

Job Sheet 2

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Uniform browning on tops and bottoms, with lighter sides				
Flavor	Blended flavor of well-baked ingredients, with no bitterness				
Texture	Tender, flaky, slightly moist, pulling off in thin sheets				
Crust	Tender, moderately smooth Free of excess flour				
Uniformity	Uniform in size with straight sides Twice the size of unbaked dough				

Total Points _____

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable why? _____
_____c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.

Job Sheet 2

- ☐ 6. Clean the work area.

Evaluator's comments: _____

**Quick Breads
Unit 9****Job Sheet 3—Prepare and Evaluate Cornbread**

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Mixer
Oven

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 3

Name: Cornbread		
Yield: 48	Portion: 2 × 2½ inches	
Utensils: Mixing bowl, flat paddle, baker's scale, spatula, measuring utensils, 12 × 18 in. baking pan		
Ingredients	Quantity	Method
Cornmeal	1 lb. 4 oz.	1. Combine dry ingredients in mixing bowl.
Flour	1 lb. 5 oz.	2. Combine eggs, milk, and shortening.
Sugar	6 oz.	Add to dry ingredients.
Salt	1 oz.	3. Mix at low speed only until ingredients
Baking powder	2 oz.	are moistened.
Eggs, beaten	5	4. Spread into greased baking pan.
Milk	1 qt.	5. Bake at 400°F for 35 minutes.
Shortening, melted, cooled	6 oz.	
Notes: 1. Batter may be baked in corn stick or muffin pans. Reduce baking time to 15 to 20 minutes. 2. For 18 × 26 × 1 in. pan, use 1½ times recipe. Cut 6 × 10 for sixty 3 × 2½ in. pieces.		

- ☐ 3. Evaluate the cornbread.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, then total all points.

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Golden brown color, with no peaks Medium rim				
Flavor	Pleasing corn flavor Not rancid or bitter				
Texture	Crisp, tender, and slightly open grain				
Crust	Slightly cracked and medium rough				
Uniformity	Same size and shape Characteristic of kind being made				

Total Points _____

Job Sheet 3**Scoring**

21-25 points — Servable; good technique
16-20 points — Check technique; serve with improvement in mind
10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.

- ☐ 6. Clean the work area.

Evaluator's comments: _____

**Quick Breads
Unit 9****Job Sheet 4—Prepare and Evaluate Banana Nut Bread**

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Mixer
Oven

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 4

Name: Banana Nut Bread		
Yield: 4 loaves, 4 × 9 inches		Portion: 14 slices per loaf
Utensils: Mixing bowl, flat paddle, baker's scale, spatula, measuring utensils, 4 loaf pans		
Ingredients	Quantity	Method
Shortening	10 oz.	1. Cream shortening and sugar at medium speed for 5 minutes.
Sugar	1 lb. 10 oz.	2. Add eggs to creamed mixture; mix at low speed for 2 minutes.
Eggs	5	3. Add bananas, and mix 1 minutes.
Bananas, mashed	1 lb. 10 oz.	4. Combine dry ingredients and nuts.
Flour	2 lb.	5. Add dry ingredients and milk to creamed mixture.
Salt	4 T.	6. Mix at low speed for 1 minute.
Soda	2 t.	7. Divide batter into four greased loaf pans, approximately 1 lb. 10 oz. per pan.
Nuts, chopped	½ t.	8. Let stand 30 minutes before baking.
Milk	8 oz.	9. Bake at 350°F for 50 minutes.
	¾ c.	

- ☐ 3. Evaluate the banana nut bread.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, then total all points.

Job Sheet 4

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Golden brown color, well rounded top, free of peaks and cracks				
Flavor	Pleasing flavor Characteristic of kind with no bitterness				
Texture	Round, even cells, free of tunnels Tender, moist, and light				
Crust	Tender, pebbly, or slightly rough and shiny				
Uniformity	Same size and shape Large in proportion to weight				

Total Points _____

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

Job Sheet 4

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.
- ☐ 6. Clean the work area.

Evaluator's comments: _____

**Quick Breads
Unit 9****Job Sheet 5—Prepare and Evaluate Cake Doughnuts**

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Mixer
Deep fat fryer

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 5

Name: Cake Doughnuts		
Yield: 4 dozen		Portion: One 2½ inch doughnut
Utensils: Mixing bowl, dough hook, baker's scale, spatula, measuring utensils, rolling pin, doughnut cutter, sifter		
Ingredients	Quantity	Method
Eggs, slightly beaten	3	1. Mix eggs, sugar, and shortening at medium speed for about 10 minutes.
Sugar	10 oz.	2. Combine dry ingredients.
Shortening, melted, cooled	1 ½ oz.	3. Add dry ingredients and milk alternately to egg mixture.
Flour	3 T.	4. Mix to form a soft dough.
Baking powder	1¼ t.	
Salt	1 t.	Note: Add more flour if dough is too soft to handle.
Nutmeg	⅛ t.	
Ginger	2 t.	
Orange rind, grated	2 c.	5. Chill, roll to ⅜-inch thickness on floured board or table.
Milk		6. Cut with 2½-inch cutter.
		7. Fry in deep fat fryer at 375°F for 3 to 4 minutes.
		8. Sprinkle with sugar when partly cool.
Note: For chocolate doughnuts, substitute 1 oz. cocoa for 1 oz. flour, and omit orange rind.		

- ☐ 3. Evaluate the cake doughnuts.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, then total all points.

Job Sheet 5

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Golden brown color, well rounded top, free of peaks and cracks				
Flavor	Pleasing flavor Characteristic of kind with no bitterness				
Texture	Round, even cells, free of tunnels Tender, moist, and light				
Volume	Lightweight in proportion to size				
Uniformity	Uniform size and shape				

Total Points _____

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

Job Sheet 5

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.
- ☐ 6. Clean the work area.

Evaluator's comments: _____

Cakes and Icings Unit 10

Objective Sheet

Unit Objective

After completing this unit the student should be able to prepare and evaluate various cakes and icings. The student should demonstrate these competencies by completing the job sheets and scoring a minimum of 85 percent on the written test.

Specific Objectives

After completing this unit, the student should be able to:

1. Match terms related to cakes with their definitions.
2. Match types of cakes with their descriptions.
3. Match cake mixing methods with their descriptions.
4. Complete cake baking guidelines.
5. Complete statements about quality standards for shortened cakes.
6. Complete statements about quality standards for foam and chiffon cakes.
7. List tips for proper cake storage.
8. Match icing terms with their definitions.
9. List the purposes of icings
10. Match basic types of icings with their applications.
11. Arrange in order the procedure for icing layer cakes.
12. Complete statements about quality standards for icings.
13. Select facts about portioning cakes.
14. Prepare and evaluate fudge cake. (Job Sheet 1)
15. Prepare and evaluate angel food cake. (Job Sheet 2)
16. Prepare and evaluate an orange chiffon cake. (Job Sheet 3)

Objective Sheet

17. Prepare and evaluate a white cake. (Job Sheet 4)
18. Prepare and evaluate boiled icing. (Job Sheet 5)
19. Prepare and evaluate orange icing. (Job Sheet 6)
20. Ice a cake. (Job Sheet 7)

Cakes and Icings Unit 10

Suggested Activities

Instructional Plan

1. Read the unit carefully and plan for instruction. Study the specific objectives to determine the order in which you will present them.
2. Review teaching suggestions below, and plan classroom activities. Integrate workplace skills as they apply to your vocational program.
3. Plan your presentation to take advantage of student learning styles and to accommodate special needs students.
4. Make transparencies from the transparency masters included with this unit. These appear in the teacher guide only and are designed to be used with the following objectives:

TM 1—Portioning Sheet Cakes (Objective 13)
TM 2—Portioning Two-Layer Cakes (Objective 13)
5. Obtain films, videotapes, posters, charts, and other items to supplement instruction of this unit. See ordering information in the "Suggested Supplemental Resources" section.
6. Review instructions for evaluating student performance and make copies of the Unit Evaluation Form.
7. Provide students with the unit of instruction.
8. Discuss and demonstrate the job sheets, and review the evaluation criteria for each. Schedule performance dates.
9. Discuss the use of the Unit Evaluation Form with the students, and select and discuss the rating scale that will be used for student evaluation.
10. Give the written test.
12. Compile job sheet ratings and written test scores on the Unit Evaluation Form.
13. Reteach and retest as required.

Suggested Activities

Teaching Suggestions

Note: Skill areas appearing in boldface type in the Teaching Suggestions refer to the academic and workplace skills identified by the American Society for Training and Development (ASTD) and the U.S. Department of Labor. These have been adapted by MAVCC.

1. Show filmstrip on mixing and baking cakes available from Prentice-Hall Media. Skill area: **listening**
2. Demonstrate mixing methods for cakes. Skill area: **listening**
3. Have examples of types of cakes available for demonstration.
4. Compare recipe cakes, cake mixes, and ready-make (frozen or retail) cakes for quality, cost, and convenience. Skill areas: **listening, critical thinking**
5. Discuss recipe changes required for high altitude cake baking if appropriate. Skill area: **listening**
6. Demonstrate icing preparation and use, and explain how to choose the proper icing for a particular cake. Skill area: **listening**
7. Review Unit 5, "Standard Recipe Use," with students.

Resources Used in Developing This Unit

1. Armendola, Joseph. *The Baker's Manual for Quantity Baking and Pastry Making*, 3rd ed. Jenks, OK: Williams Book Company.
2. Armendola, Joseph and D. Lundberg. *Understanding Baking*. Boston: CBI Publishing Company.
3. *Baking Handbook for the School Food Service Program*. Minneapolis, MN: General Mills.
4. Sultan, William J. *Elementary Baking*. New York: McGraw-Hill Book Company.
5. Shugart, Grace and Mary Molt. *Food for Fifty*, 8th ed. New York: Macmillan, 1989.

Suggested Activities

Suggested Supplemental Resource

Order filmstrip on mixing and baking cakes from:

Prentice-Hall Media
ServCode BF
150 White Plains Road
Tarrytown, NY 10591

Instructions For Evaluating Student Performance

When the student is ready to perform a specific task, obtain a copy of the job sheet which may be found in either the teacher or student edition. Then observe the student performing the procedure.

Process evaluation—Place a mark in the box to the left of each designated checkpoint if the student has satisfactorily achieved the step(s) for each checkpoint area. If the student is unable to correctly complete the procedure, have the student review the materials and try again.

Product evaluation—Once the student has satisfactorily completed the procedure, rate the student product (outcome) using the criteria which have been provided as part of the job sheet. If the student's product is unacceptable, have the student review the materials and submit another product for evaluation.

Sample performance evaluation keys have been provided below. Many other keys are available. Select one rating (grading scale) which best fits your program needs.

Option A

- 4 - Skilled—Can perform job with no additional training.
- 3 - Moderately skilled—Has performed job during training program; limited additional training may be required.
- 2 - Limited skill—Has performed job during training program; additional training is required to develop skill.
- 1 - Unskilled—Is familiar with process, but is unable to perform job.

Option B

- Yes—Can perform job with no additional training.
- No—Is unable to perform job satisfactorily.

Cakes and Icings Unit 10

Answers to Written Test

1. a. 5 d. 8 g. 3 j. 9
 b. 11 e. 1 h. 2 k. 7
 c. 4 f. 6 i. 10
2. a. 1 e. 6
 b. 4 f. 5
 c. 7 g. 2
 d. 3
3. a. 3
 b. 1
 c. 2
4. a. 1 e. 2
 b. 2 f. 3
 c. 4 g. 2
 d. 3 h. 3
5. a. 1 d. 3
 b. 1 e. 1
 c. 2
6. a. 3 d. 4
 b. 2 e. 1
 c. 4
7. a. Carefully wrap to prevent loss of moisture and absorption of odors.
 b. Store uniced to maintain quality and appearance.
 c. Freeze.
 d. Thaw at room temperature prior to icing.
8. a. 2 e. 4
 b. 7 f. 6
 c. 1 g. 8
 d. 5 h. 3
9. a. Improving the keeping quality of the cake
 b. Forming a protective coating that helps retain the cake's moisture
 c. Improving the taste and appearance of the product

Answers to Written Test

10. a. 2 d. 3
b. 4 e. 7
c. 1, 6 f. 5
11. a. 5 d. 1
b. 2 e. 3
c. 5 f. 4
12. a. Color
b. Color
c. Creamy
d. Thin
e. Kind
13. a. Different
b. Fewer
c. Specific
d. Fork

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Cakes and Icings
Unit 10

Written Test

Name _____ Score _____

1. Match terms related to cakes with their definitions. Write the correct numbers in the blanks.

- | | | |
|----------|---|--------------------|
| _____ a. | To mix by gently turning ingredients without stirring or beating | 1. Cake tester |
| _____ b. | A cake pan that has high sides and a tube in the center; used for baking foam cakes | 2. Chiffon cake |
| _____ c. | A cake that does not contain fat and is usually leavened entirely by the natural agents air and steam | 3. Cream of tartar |
| _____ d. | A blend of cornstarch or flour and shortening used to coat cake pans | 4. Foam cake |
| _____ e. | A stiff wire that can be inserted into a cake to help determine whether or not the cake is done | 5. Fold |
| _____ f. | The action that produces gases that cause batter to increase in volume | 6. Leavening |
| _____ g. | A stabilizer often used in foam cakes | 7. Loaf cake |
| _____ h. | A cake that contains both foam and fat with no chemical leavening agent added; ingredients are mixed separately and folded together | 8. Pan coating |
| _____ i. | A substance added to beaten egg whites to keep the foam from losing its volume | 9. Shortened cake |
| _____ j. | A cake that contains butter or a special kind of shortening, as well as a chemical source of leavening, usually baking powder | 10. Stabilizer |
| _____ k. | A cake baked in a loaf pan | 11. Tube pan |

Written Test

2. Match types of cakes with their descriptions. Write the correct numbers in the blanks.

- | | | |
|----------|--|--------------------|
| _____ a. | Flat or rectangular cake that is often baked when a large number of servings are needed | 1. Sheet cake |
| _____ b. | Small cakes baked in a muffin pan | 2. Layer cake |
| _____ c. | A cross between a shortened cake and a foam cake | 3. Pound cake |
| _____ d. | A dense, fine-grained cake containing whole eggs | 4. Cupcakes |
| _____ e. | A springy cake containing whole eggs or sometimes egg yolks | 5. Angel food cake |
| _____ f. | A light cake in which egg whites are used | 6. Sponge cake |
| _____ g. | A cake composed of two or more pieces of cake stacked on top of each other and finished as a whole | 7. Chiffon cake |

3. Match cake mixing methods with their descriptions. Write the correct numbers in the blanks.

- | | | |
|----------|--|---------------------|
| _____ a. | Dry ingredients, shortening, and part of liquid are mixed, and then the remainder of the liquid is added | 1. Creaming method |
| _____ b. | Sugar, butter or shortening, and flavorings are creamed together to incorporate large amounts of air | 2. Whipped method |
| _____ c. | Eggs and sugar are warmed to a temperature of 100°F and then whipped until the desired volume and stiffness are obtained | 3. Two-stage method |

4. Complete cake baking guidelines. Write the correct numbers in the blanks.

- _____ a. _____ the oven and set it at the right temperature.
1. Preheat
 2. Test
 3. Adjust
 4. Open

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Written Test

- _____ b. Bake the cake for ____ as indicated on the recipe.
1. 30 minutes
 2. the correct length of time
 3. 45 minutes
 4. 10 minutes less than the length of time
- _____ c. Use the correct pan ____ for the cake being baked.
1. material
 2. coating
 3. temperature
 4. size and shape
- _____ d. Prepare the bottom of the baking pan with either paper liners or ____.
1. oil
 2. butter
 3. pan coating
 4. fat
- _____ e. Scale the batter by weight for the type of ____ and by volume for the type of ____.
1. cake; pan
 2. pan; cake
 3. ingredients; liquids
 4. liquids; ingredients
- _____ f. Which of the following is NOT a way to test cakes for doneness?
1. Inserting a cake tester in center
 2. Pressing center gently with finger
 3. Observing whether cake is depressed in center
 4. Observing whether cake has separated from sides of pan
- _____ g. Remove cake from pan while still warm, and cool ____ to allow full air circulation.
1. in the refrigerator
 2. on a rack
 3. in the freezer
 4. slowly in cold oven

Written Test

- _____h. Cool the cake ____.
1. on its side
 2. propped on the pan
 3. with flat side down
 4. with flat side up
5. Complete quality standards for shortened cakes. Write the correct numbers in the blanks.
- _____a. Cake should be symmetrical in shape with a ____ top.
1. rounded
 2. peaked
 3. level
 4. slightly depressed
- _____b. Flavor should be free of excessive flavor of ____.
1. leavening
 2. eggs
 3. food colorings
 4. flour
- _____c. Texture should be tender with moist crumbs and ____ to the tongue.
1. crumbly
 2. velvety
 3. dry
 4. feathery
- _____d. Volume should be ____.
1. dense in proportion to size
 2. heavy in proportion to size
 3. lightweight in proportion to size
 4. extremely lightweight in proportion to size
- _____e. Structure should have ____.
1. fine, round grain
 2. dense, elongated grain
 3. large, round grain
 4. thick cell walls

Written Test

6. Complete quality standards for foam cakes. Write the correct numbers in the blanks.

_____ a. Cake should be symmetrical in shape with a ____ top.

1. rounded
2. peaked
3. level
4. slightly depressed

_____ b. Flavor should be free of excessive flavor of ____.

1. leavening
2. eggs
3. shortening
4. flour

_____ c. Texture should be tender with moist crumbs and ____ to the tongue.

1. crumbly
2. moist
3. dry
4. feathery

_____ d. Volume should be ____.

1. dense in proportion to size
2. heavy in proportion to size
3. lightweight in proportion to size
4. extremely lightweight in proportion to size

_____ e. Structure should have ____.

1. fine, round grain
2. dense, elongated grain
3. large, round grain
4. thick cell walls

7. List tips for proper cake storage.

- a. _____
- b. _____
- c. _____
- d. _____

Written Test

8. Match icing terms with their definitions. Write the correct numbers in the blanks.

- | | | |
|----------|--|----------------------|
| _____ a. | A thick, rich icing made by creaming together shortening and powdered sugar and adding flavorings | 1. Boiled icing |
| _____ b. | A special type of icing that hardens when dry and that is used to make three-dimensional flowers and other icing decorations | 2. Buttercream icing |
| _____ c. | Type of icing applied to a cake in generous amounts so that peaks form; made by combining sugar, glucose, and water, boiling these ingredients, and then adding the mixture to an egg white meringue while still hot | 3. Flat icing |
| _____ d. | A rich heavy-bodied icing applied to cake while still warm; prepared by adding hot liquid or syrup to main ingredients while whipping | 4. Fondant |
| _____ e. | A cooked mixture of water, glucose, and granulated sugar used as an icing or as a base for icing | 5. Fudge icing |
| _____ f. | A variation of boiled icing with stabilizers added to prevent it from breaking down | 6. Marshmallow icing |
| _____ g. | A sweet mixture that has sugar as its main ingredient and that is used as a filling or coating for cakes and cookies | 7. Royal icing |
| _____ h. | A thin glaze made of hot water and confectioners sugar; poured over cake and drizzled down sides | 8. Icing |

9. List the purposes of icings.

- a. _____
- b. _____
- c. _____

Written Test

10. Match basic types of icings with their applications. Write the correct numbers in the blanks. Some blanks may contain more than one number.

- | | | |
|----------|--|----------------------|
| _____ a. | Layer cakes and decorated cakes | 1. Boiled icing |
| _____ b. | As a base for other icings | 2. Buttercream icing |
| _____ c. | Foam cakes | 3. Flat icing |
| _____ d. | Coffee cakes, Danish cakes, and pastries | 4. Fondant |
| _____ e. | For decorating and flower making | 5. Fudge icing |
| _____ f. | Cupcakes and layer cakes | 6. Marshmallow icing |
| | | 7. Royal icing |

11. Arrange in order the procedure for icing layer cakes. Write a "1" before the first step, a "2" before the second step, and so on.

- _____ a. Spread thin icing thinly over entire cake, starting at the center and working outward, or for thick icing, frost the sides of the cake from bottom to top.
- _____ b. Invert the first layer, top down, on turntable or decorator's wheel.
- _____ c. Put a liberal amount of icing on top of the cake and work from center to edges.
- _____ d. Remove all crumbs.
- _____ e. Spread filling evenly over first layer.
- _____ f. Place second layer right side up on first layer.

12. Complete statements about quality standards for icings. Circle the correct word(s).

- a. Style and (consistency, color) suitable for occasion
- b. Delicate and pleasing flavor characteristic of (color, texture) and kind
- c. Texture (granulated, creamy) and moist; free of stickiness, crystals, or crust
- d. Distributed evenly with no (thick, thin) spots
- e. Compatibility suitable for the (kind, color) of cake

Written Test

13. Complete statements about portioning cakes. Circle the correct word(s).
- a. (Same, Different) portion sizes may result in guest dissatisfaction.
 - b. Inaccurate cutting, which results in (fewer, more) portions increases cost.
 - c. Portion control measuring devices are available but are limited to (general, specific) uses.
 - d. Foam or chiffon cakes not suitable to cutting with a knife should be portioned and cut with a "(fork-, spoon-)" type cutter.

*Permission to duplicate this test is granted.

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**Cakes and Icings
Unit 10**

Unit Evaluation Form

Student Name _____ Unit Rating _____

Job Sheet 1—Prepare and Evaluate Fudge Cake Rating _____

Comments: _____

Job Sheet 2—Prepare and Evaluate Angel Food Cake Rating _____

Comments: _____

Job Sheet 3—Prepare and Evaluate Orange Chiffon Cake Rating _____

Comments: _____

Job Sheet 4—Prepare and Evaluate White Cake Rating _____

Comments: _____

Job Sheet 5—Prepare and Evaluate Boiled Icing Rating _____

Comments: _____

Job Sheet 6—Prepare and Evaluate Orange Icing Rating _____

Comments: _____

Job Sheet 7—Ice a Cake Rating _____

Comments: _____

Unit Evaluation Form

Written Test Scores

Pretest _____

Posttest _____

Other _____

Other _____

Teacher Signature _____

Date _____

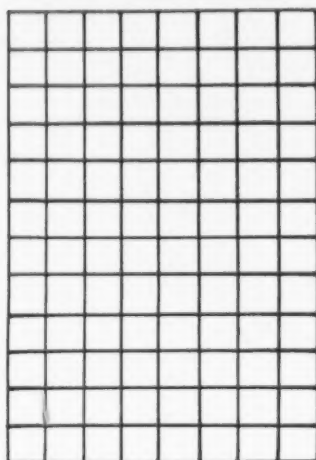
Student Signature _____

Date _____

*Permission to duplicate this form is granted.

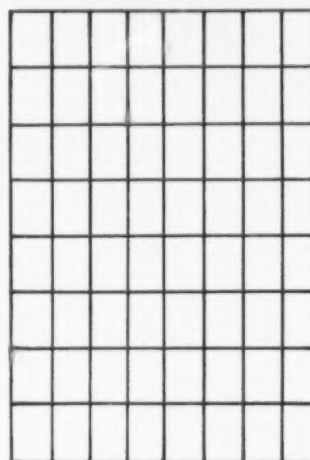
Portioning Sheet Cakes

96 Servings



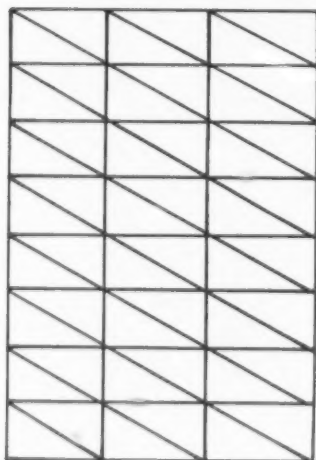
Approx. 2 × 2 Inches

64 Servings



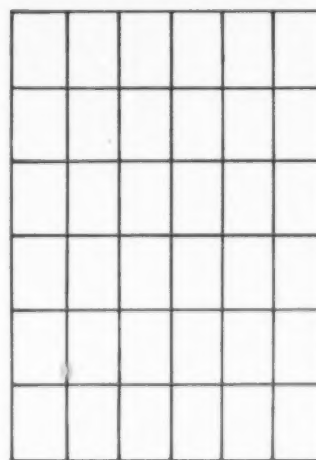
Approx. 2 × 3 Inches

48 Servings



Approx. 3 × 5 Inches

36 Servings

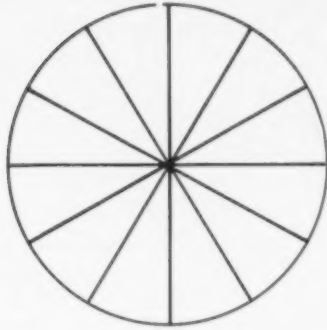


Approx. 2 × 5 Inches

Servings based on a 16 × 24-inch pan size.

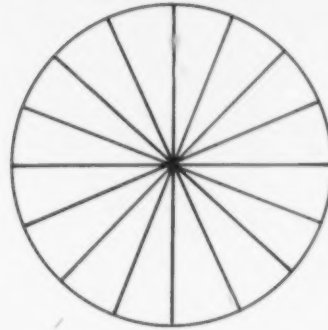
Portioning Two-Layer Cakes

10-12 Servings



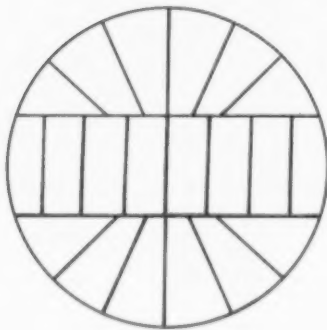
8 Inch - 2 Layer

14-16 Servings



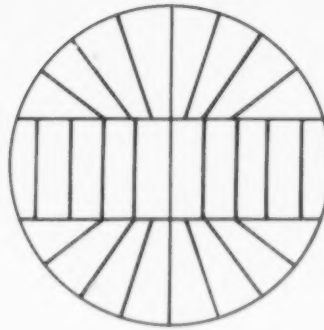
9 Inch - 2 Layer

20 Servings



10 Inch - 2 Layer

26 Servings



12 Inch - 2 Layer

Cakes and Icings Unit 10

Information Sheet

1. Cake terms and definitions

- a. **Cake tester** — A stiff wire that can be inserted into a cake to help determine whether or not the cake is done
- b. **Chiffon cake** — A cake that contains both foam and fat with no chemical leavening agent added; ingredients are mixed separately and folded together
- c. **Cream of tartar** — A stabilizer often used in foam cakes
- d. **Foam cake** — A cake that does not contain fat and is usually leavened entirely by the natural agents air and steam
- e. **Fold** — To mix by gently turning ingredients without stirring or beating
- f. **Leavening** — The action that produces gases that cause batter to increase in volume
- g. **Loaf cake** — A cake baked in a loaf pan
- h. **Pan coating** — A blend of cornstarch or flour and shortening used to coat cake pans
- i. **Shortening cake** — A cake that contains butter or a special kind of shortening, as well as a chemical source of leavening, usually baking powder
- j. **Stabilizer** — A substance added to beaten egg whites to keep the foam from losing its volume
- k. **Tube pan** — A cake pan that has high sides and a tube in the center; used for baking foam cakes

2. Types of cakes

- a. Shortened cakes
 - **Sheet**—Flat or rectangular cake that is often baked when a large number of servings are needed
 - **Layer**—A cake composed of two or more pieces of cake stacked on top of each other and finished as a whole
 - **Pound**—A dense, fine-grained cake containing whole eggs
 - **Cupcakes**—Small cakes baked in a muffin pan

Information Sheet

b. Foam cakes

- **Angel food cake**—A light cake in which egg whites are used

Note: Care should be taken to ensure cleanliness of utensils when making angel food cakes.

- **Sponge cake**—A springy cake containing whole eggs or sometimes egg yolks

c. Chiffon cake—A cross between a shortened cake and a foam cake

3. Methods of cake mixing

- a. **Creaming method**—Sugar, butter or shortening, and flavorings are creamed together to incorporate large amounts of air
- b. **Whipped method**—Eggs and sugar are warmed to a temperature of 100°F and then whipped until the desired volume and stiffness are obtained
- c. **Two-stage method**—Dry ingredients, shortening, and part of liquid are mixed, and then the remainder of the liquid is added

4. Guidelines for baking cakes

- a. Preheat the oven and set it at the right temperature.
- b. Bake the cake for the correct length of time indicated on the recipe.

Note: Make adjustments if the oven temperature varies.

- c. Use the correct pan size and shape for the cake being baked.

Note: If the pan is too small, the batter may overflow or the center of the cake may bake improperly. If the pan is too large, baking time will be affected. Cake pans should be handled carefully to prevent bending.

- d. Prepare the bottom of the baking pan with either paper liners or pan coating.

Note: Shortening rather than oil should be used for pan coating.

- e. Scale the batter by weight for the type of pan and by volume for the type of cake.

Information Sheet

- f. Test cakes for doneness by
 - Checking the center with a cake tester,
 - Pressing the center gently with a finger (if light impression remains the cake is done), or
 - Observing whether the cake has separated from the sides of the pan.
- g. Remove the cake from the pan while still warm, and cool on a rack to allow full air circulation.
- h. When removing the cake from the pan, loosen the sides from the pan and turn the cake out on a cooling rack with the flat side down.

5. Quality standards for shortened cakes

- a. **Appearance**—Symmetrical Shape with slightly rounded top free of cracks or peaks; color should be light brown except where ingredients darken it
- b. **Flavor**—Well blended ingredients; free of undesirable flavors from shortening, leavening, or other ingredients
- c. **Texture**—Tender with moist crumbs; velvety to the tongue
- d. **Volume**—Lightweight in proportion to size
- e. **Structure**—Fine round grain, evenly distributed cells with thin cell walls; free of tunnels

6. Quality standards for foam cakes

- a. **Appearance**—Symmetrical shape with level top, smooth surface; color should be light brown except where ingredients darken it
- b. **Flavor**—Delicate; well blended ingredients; free of excessive flavor of eggs
- c. **Texture**—Tender, feathery, resilient crumbs
- d. **Volume**—Extremely lightweight in proportion to size
- e. **Structure**—Fine round grain, evenly distributed cells with thin cell walls; free of tunnels

Information Sheet

7. Tips for proper cake storage

Note: Cakes prepared in job sheets in this unit may be frozen and stored until ready for use in Unit 11, "Cake Decorating."

- a. Carefully wrap to prevent loss of moisture and absorption of odors.
- b. Store uniced to maintain quality and appearance.
- c. Freeze.
- d. Thaw at room temperature prior to icing.

Note: Layer cakes require two hours for thawing.

8. Icing terms and definitions

- a. **Boiled icing** — Type of icing applied to a cake in generous amounts so that peaks form; made by combining sugar, glucose, and water, boiling these ingredients, and then adding the mixture to an egg white meringue while still hot
- b. **Buttercream icing** — A thick, rich icing made by creaming together shortening and powdered sugar and adding flavorings
- c. **Flat icing** — A thin glaze made of hot water and confectioners sugar; poured over cakes and drizzled down sides
- d. **Fondant** — A cooked mixture of water, glucose, and granulated sugar used as an icing or as a base for icing
- e. **Fudge icing** — A rich heavy-bodied icing applied to cake while still warm; prepared by adding hot liquid or syrup to main ingredients while whipping
- f. **Icing** — A sweet mixture that has sugar as its main ingredient and that is used as a filling or coating for cakes and cookies
- g. **Marshmallow icing** — A variation of boiled icing with stabilizers added to prevent it from breaking down
- h. **Royal icing** — A special type of icing that hardens when dry and that is used to make three-dimensional flowers and other icing decorations

9. Purposes of icings

- a. Improving the keeping quality of the cake
- b. Forming a protective coating that helps retain the cake's moisture
- c. Improving the taste and appearance of the product

Information Sheet

10. Applications of basic types of icings

- a. **Boiled icing** — Foam cakes

Note: Boiled icing should be prepared only as needed because it breaks down if stored overnight.

- b. **Buttercream icing** — Layer cakes and decorated cakes

- c. **Flat icing** — Coffee cakes, Danish cakes, and pastries

- d. **Fondant** — As a base for other icings

Note: Fondant is difficult to make and is generally purchased in quantity from a supplier.

- e. **Fudge icing** — Cupcakes and layer cakes

- f. **Marshmallow icing** — Foam cakes

- g. **Royal icing** — For decorating and flower making

11. Procedure for icing layer cakes

- a. Remove all crumbs.

- b. Have icing at proper consistency.

- c. Invert the first layer, top down, on turntable or decorator's wheel.

- d. Spread filling evenly over first layer.

- e. Place second layer right side up on first layer.

- f. Spread thin icing thinly over entire cake, starting at the center and working outward.

- g. With a thick frosting, frost the sides of the cake from bottom to top.

- h. Put a liberal amount of icing on top of the cake and work from center to edges.

Note: Icing may be smoothed, swirled, or peaked when placed on the cake.

Information Sheet

12. Standards of quality for icings

- a. **Appearance**—Style and color suitable for occasion
- b. **Flavor**—Delicate and pleasing flavor characteristic of color and kind
Example: Cherry icing should be red or pink
- c. **Texture**—Creamy and moist; free of stickiness, crystals, or crust
- d. **Distribution**—Even, with no thin spots
- e. **Compatibility**—Suitable for the kind of cake

13. Factors affecting portioning of cakes (Transparencies 1 and 2)

- a. Different portion sizes may result in guest dissatisfaction.
- b. Inaccurate cutting, that results in fewer portions increases cost.
- c. Portion control measuring devices are available but are limited to specific uses.
- d. Foam or chiffon cakes not suitable for cutting with a knife should be portioned and cut with a "fork-" type cutter.

Cakes and Icings Unit 10

Job Sheet 1—Prepare and Evaluate a Fudge Cake

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Mixer
Oven

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 1

Name: Fudge Cake		
Yield: 3 two-layer cakes		Portion: 14 to 18 slices per cake
Utensils: Mixing bowl, baker's scale, spatula, 9-inch cake pans (6), measuring utensils		
Ingredients	Quantity	Method
Shortening	12 oz.	1. Cream shortening, sugar, and vanilla at medium speed for 10 minutes.
Sugar	2 lb.	2. Add eggs, and mix at medium speed for 5 minutes.
Vanilla	1 T.	3. Mix cocoa and hot water.
Eggs	6	4. Combine flour, salt, and soda.
Cocoa	5 oz.	5. Mixing at low speed, add dry ingredients alternately with buttermilk and cocoa to creamed mixture.
Water, hot	1½ c.	6. Scrape down bowl; continue mixing until smooth and ingredients are mixed.
Cake flour	1 lb. 12 oz.	7. Scale into 6 greased 9-inch layer pans, 1 lb. 4 oz. per pan.
Salt	1 t.	8. Bake at 350°F for 25 to 30 minutes.
Soda	1½ T.	9. Ice with boiled icing. (See Job Sheets 5 and 7 in the unit.)
Buttermilk	3 c.	

- ☐ 3. Evaluate the fudge cake.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Job Sheet 1

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Slightly rounded top, free of cracks or peaks Light brown except where ingredients darken color				
Flavor	Well-blended ingredients free or undesirable flavor from shortening, leavening, flavoring, or other ingredients				
Texture	Tender, moist crumbs Feels velvety to the tongue				
Volume	Lightweight in proportion to size				
Structure	Fine round grain, evenly distributed cells with thin walls Free of tunnels				

Total Points _____

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

Job Sheet 1

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

☐ 5. Clean utensils, and return unused ingredients to proper storage.

☐ 6. Clean the work area.

Evaluator's comments: _____

Cakes and Icings Unit 10

Job Sheet 2—Prepare and Evaluate an Angel Food Cake

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Mixer
Oven

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 2

Name: Angel Food Cake		
Yield: 3 cakes (10 in. dia.)		Portion: 14 to 14 slices per cake
Utensils: Mixing bowl, spatula, measuring utensils, baker's scale, tube cake pans (3)		
Ingredients	Quantity	Method
Egg whites	2 lb. 8 oz. (5 c.)	1. Beat egg whites at high speed for 1 minute. Do not overmix.
Salt	1 t.	2. Add salt and cream of tartar.
Cream of tartar	2 T.	3. Continue beating until egg whites are just stiff enough to hold shape.
Sugar	1 lb. 8 oz.	4. Add sugar slowly at medium speed.
Vanilla	1 T.	5. Add vanilla; continue beating at high speed for 2 minutes or until mixture will stand in stiff peaks. Do not overmix.
Almond extract (optional)	1 t.	6. Mix sugar and flour.
Sugar	12 oz.	7. Gradually add sugar and flour mixture to egg whites at low speed.
Cake flour	12 oz.	8. Continue mixing 2 minutes after last addition.
		9. Pour into three ungreased tube pans.
		10. Bake at 325°F for 50 minutes.
		11. Immediately upon removal from oven, invert cake to cool. Do not remove from pan.
		12. Ice with orange icing. (See Job Sheet 6 in this unit.)
Notes: 1. Either frozen or fresh egg whites may be used. The frozen egg whites should be approximately 70°F when whipped. 2. Each cake pan needs to be extremely clean. Any fat residue will prevent the cake from rising. 3. Cake may be cooled by turning upside down on a long-necked bottle.		

- ☐ 3. Evaluate the angel food cake.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Job Sheet 2

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Symmetrical shape Light brown except where ingredients darken color				
Flavor	Delicate Ingredients well-blended, free of excessive flavor of eggs, flavorings, or acid				
Texture	Tender, feathery, with resilient crumb				
Volume	Extremely lightweight in proportion to size				
Structure	Fine round grain, evenly distributed cells with thin walls Free of tunnels				

Total Points _____

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

Job Sheet 2

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

☐ 5. Clean utensils, and return unused ingredients to proper storage.

☐ 6. Clean the work area.

Evaluator's comments: _____

Cakes and Icings Unit 10

Job Sheet 3—Prepare and Evaluate an Orange Chiffon Cake

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Mixer
Oven

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 3

Name: Orange Chiffon Cake		
Yield: Three 10-inch cakes		Portion: 12 to 14 slices per cake
Utensils: Mixing bowls (2), flat paddle, wire whip, baker's scale, measuring utensils, 10-inch tube cake pans (3)		
Ingredients	Quantity	Method
Cake flour	1 lb. 8 oz.	1. Combine dry ingredients (only 1 lb. 3 oz. of sugar) and mix at low speed.
Baking powder	1½ oz. (3 T.)	2. Add oil, yolks, and water.
Salt	2 t.	3. Mix at medium speed until smooth.
Sugar	1 lb. 3 oz.	4. Add orange juice and rind gradually.
Salad oil	1½ c.	5. Mix well after each addition, but avoid overmixing.
Eggs yolks, beaten	1 lb. (2 c.)	6. In separate mixing bowl, whip egg whites until foamy.
Water	1½ c.	7. Add cream of tartar; continue beating until egg whites form soft peaks.
Orange juice	1 c.	8. Add remaining 2½ c. sugar gradually and continue beating until very stiff.
Orange rind, grated	2 T.	9. Fold gently into the batter.
Egg whites	1 lb. 4 oz. (2½ c.)	10. Pour into three ungreased tube pans.
Cream of tartar	2 t.	11. Bake in preheated oven at 350°F for 45 to 50 minutes.
Sugar	1 lb. 2 oz.	12. Turn cake upside down as soon as removed from oven.
		13. When cake has cooled, remove from pans.
Note: After baking, cake and pan may be placed upside down on a long-necked bottle to cool.		

- ☐ 3. Evaluate the orange chiffon cake.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Job Sheet 3

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Symmetrical shape with smooth level top Color light brown except where ingredients darken the color				
Flavor	Delicate Well-blended ingredients free of excessive flavor of eggs, flavorings, or acid				
Texture	Tender, feathery, with resilient crumb				
Volume	Extremely lightweight in proportion to size				
Structure	Fine round grain, evenly distributed cells with thin walls Free of tunnels				

Total Points _____

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

Job Sheet 3

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

☐ 5. Clean utensils, and return unused ingredients to proper storage.

☐ 6. Clean the work area.

Evaluator's comments: _____

Cakes and Icings Unit 10

Job Sheet 4—Prepare and Evaluate a White Cake

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Mixer
Oven

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 4

Name: White Cake		
Yield: One 12 × 20 × 2 in. pan		Portion: Forty-eight 2 × 2½ slices
Utensils: Mixing bowl, spatula, baker's scale, measuring utensils, baking pan		
Ingredients	Quantity	Method
Cake flour	1 lb. 8 oz.	Note: This is the two-stage method. 1. Mix flour, baking powder, and shortening at low speed for 2 minutes. 2. Scrape down bowl; mix 3 minutes more. 3. Add combined sugar, salt, and milk. Mix at low speed for 2 minutes. 4. Scrape down bowl; mix 3 minutes more. 5. Add half of combined egg whites, milk, and vanilla. Mix at low speed for 30 seconds. 6. Mix for 1 minute, scraping down bowl. 7. Add remaining egg-milk mixture; mix at low speed for 1 minute. 8. Scrape down bowl; mix for 2½ minutes. 9. Pour into greased baking pan. 10. Bake at 350°F for 40 to 50 minutes.
Baking powder	1 oz.	
Shortening	12 oz.	
Sugar	1 lb. 8 oz.	
Salt	1½ t.	
Milk	1 c.	
Egg yolks	8	
Milk	1¼ t.	
Vanilla	1 T.	
Note: For six 9-inch layer pans, use 1½ recipe; scale 1 lb. 6 oz. per pan.		

- ☐ 3. Evaluate the white cake.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Job Sheet 4

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Slightly rounded top, free of cracks or peaks Light brown except where ingredients darken the color				
Flavor	Well-blended ingredients free of undesirable flavor from shortening, leavening, flavoring, or other ingredients				
Texture	Tender, moist crumb Feels velvety to tongue				
Volume	Lightweight in proportion to size				
Structure	Fine round grain, evenly distributed cells with thin walls Free of tunnels				

Total Points _____

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

Job Sheet 4

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

☐ 5. Clean utensils, and return unused ingredients to proper storage.

☐ 6. Clean the work area.

Evaluator's comments: _____

Cakes and Icings Unit 10

Job Sheet 5—Prepare and Evaluate Boiled Icing

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Mixer
Oven

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 5

Name: Boiled Icing		
Yield: 2½ qts.		
Utensils: Baker's scale, measuring utensils, mixing bowl, wire whip, sifter, thermometer		
Ingredients	Quantity	Method
Granulated sugar Water, hot Egg whites Powdered sugar, sifted Vanilla	1 lb. 8 oz. 1 c. 9 11 oz. 1 T.	1. Combine sugar and water. 2. Boil to soft ball stage (238°F) without stirring. 3. Beat egg whites until frothy. 4. Add 3 oz. powdered sugar and beat at high speed to consistency of meringue. 5. Add hot syrup slowly while beating until mixture is thick and creamy. 6. Add 8 oz. powdered sugar and vanilla and beat until smooth. 7. Add more sugar if necessary to make icing hold its shape when spread.
Note: This icing should be prepared only as needed.		

- ☐ 3. Evaluate the boiled icing.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Job Sheet 5

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Color and style suitable for occasion				
Flavor	Delicate and pleasing Characteristic of kind				
Texture	Creamy and moist Free of stickiness, crystals or crust Forms peaks when applied				
Distribution	Even, well covered No thin spots				
Compatibility	Icing suitable to kind of cake				

Total Points _____

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.

Job Sheet 5

- ☐ 6. Clean the work area.

Evaluator's comments: _____

Cakes and Icings Unit 10

Job Sheet 6—Prepare and Evaluate Orange Icing

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment—Mixer

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 6

Name: Orange Icing		
Yield: 1¼ qt.		
Utensils: Baker's scale, measuring utensils, mixing bowl, flat paddle, sifter		
Ingredients	Quantity	Method
Butter or margarine	8 oz.	1. Cream butter or margarine.
Powdered sugar, sifted	2 lb. 8 oz.	2. Add sugar gradually at medium speed.
Vanilla	2 T.	3. Mix until creamy.
Salt	½ t.	4. Add remaining ingredients.
Orange juice	¼ c.	5. Blend until smooth.
Lemon juice	¼ c.	
Orange rind, grated	1 t.	

- ☐ 3. Evaluate the orange icing.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, then total all points.

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Color and style suitable for occasion				
Flavor	Delicate and pleasing Characteristic of kind				
Texture	Creamy and moist Free of stickiness, crystals or crust Forms peaks when applied				
Distribution	Even, well covered No thin spots				
Compatibility	Icing suitable to kind of cake				

Total Points _____

Job Sheet 6

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.

- ☐ 6. Clean the work area.

Evaluator's comments: _____

Cakes and Icings Unit 10

Job Sheet 7—Ice a Cake

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Top and bottom cake layers aligned	_____
Icing evenly distributed (no thin spots)	_____
Icing free of cake crumbs	_____
Work area well organized and cleaned	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Fudge cake (Job Sheet 1)
Boiled icing (Job Sheet 5)
Turntable
Spatulas
Large icing tube/tip

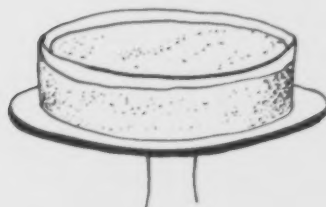
B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Brush off any loose crumbs from the base layer of the cake.
- ☐ 3. Set the bottom layer on the turntable, attaching it with a few dabs of icing.

Job Sheet 7

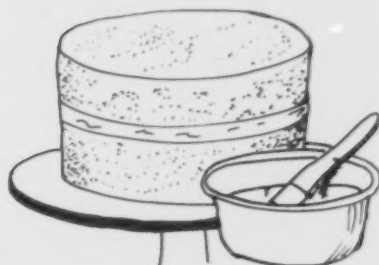
- ☐ 4. Place a ring of icing around the top edge of the layer, using any large tube, and then spread the filling within it. (Figure 1)

Figure 1



- ☐ 5. Brush any loose crumbs from the top layer.
- ☐ 6. Set the top layer on the base layer. (Figure 2)

Figure 2



- ☐ 7. Give the cake a crumb coating.
- a. Use a spatula to cover the cake with a very thin coat of icing.
- Note: This coat will mask the color of the cake so that it will not show through.
- b. Let icing set about 10 minutes until a crust forms.

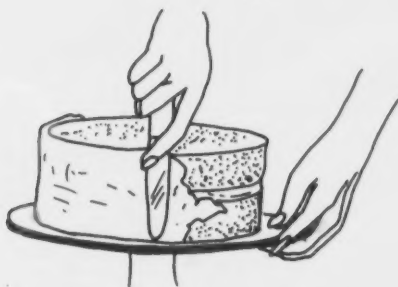
Job Sheet 7

8. Apply the final coat of icing.

- ☐ a. Cover the sides of the cake. (Figure 3)

Note: Work from the bottom up, using long even strokes and plenty of icing. Build up the icing a little at the top edge of the cake. Turn the turntable as the icing is spread. Do not smooth the icing.

Figure 3



- ☐ b. Heap icing on the top of the cake, and spread using tip of spatula to form peaks. (Figure 4)

Figure 4



Job Sheet 7

- ☐ c. Spread icing on the sides using tip of spatula to form peaks. (Figure 5)

Figure 5



- ☐ 9. Slide a spatula under the cake and transfer it to a serving tray or foil-covered cake board.
- ☐ 10. Clean utensils, and return unused ingredients to proper storage.
- ☐ 11. Clean the work area.

Evaluator's comments: _____

Cake Decorating Unit 11

Objective Sheet

Unit Objective

After completing this unit, the student should be able to use the proper equipment and color principles to prepare simple cake decorations. The student should demonstrate these competencies by completing the job sheets and scoring a minimum of 85 percent on the written test.

Specific Objectives

After completing this unit, the student should be able to:

1. Select from a list equipment used in cake decorating.
2. Select from a list advantages of paste colors over liquid or powdered colors for cake decorating.
3. Match color combinations with their resultant colors.
4. Match color terms with their definitions.
5. Complete guidelines for preparing a cake for decorating.
6. Complete guidelines for using a flower nail.
7. Prepare and evaluate buttercream icing. (Job Sheet 1)
8. Prepare and evaluate royal icing. (Job Sheet 2)
9. Ice a cake before decorating. (Job Sheet 3)
10. Prepare a decorating cone and tube. (Job Sheet 4)
11. Make a border. (Job Sheet 5)
12. Make a rose. (Job Sheet 6)

Cake Decorating Unit 11

Suggested Activities

Instructional Plan

1. Read the unit carefully and plan for instruction. Study the specific objectives to determine the order in which you will present them.
2. Review teaching suggestions below, and plan classroom activities. Integrate workplace skills as they apply to your vocational program.
3. Plan your presentation to take advantage of student learning styles and to accommodate special needs students.
4. Make transparency from the transparency master included with this unit. This appears in the teacher guide only and is designed to be used with the following objective:

TM 1—Decorating Tubes (Objective 1)
5. Obtain films, videotapes, posters, charts, and other items to supplement instruction of this unit.
6. Review instructions for evaluating student performance and make copies of the Unit Evaluation Form.
7. Provide students with the unit of instruction.
8. Discuss and demonstrate the job sheets, and review the evaluation criteria for each. Schedule performance dates.
9. Discuss the use of the Unit Evaluation Form with the students, and select and discuss the rating scale that will be used for student evaluation.
10. Give written test.
11. Compile job sheet ratings and written test scores on the Unit Evaluation Form.
12. Reteach and retest as required.

Suggested Activities

Teaching Suggestions

Note: Skill areas appearing in boldface type in the Teaching Suggestions refer to the academic and workplace skills identified by the American Society for Training and Development (ASTD) and the U.S. Department of Labor. These have been adapted by MAVCC.

1. Show students the many varieties of available decorating tubes. Describe the purposes of and demonstrate the decorations that can be made with each tube. Skill areas: **listening, learning to learn**
2. Provide students with examples of other cake decorations that can be made and discuss their uses. Skill area: **listening**
3. Show pictures of decorated cakes to students. Have students discuss the varieties of decorating and evaluate the overall appearance of each cake. Skill areas: **listening, oral communication, learning to learn, critical thinking**
4. Have students create a bulletin board of different cake decorations gleaned from magazines. Skill areas: **teamwork, creative thinking**
5. Invite a local person who specializes in cake decorating to the class to give a demonstration. Skill area: **listening**
6. Discuss ways to apply basic cake decorating skills and utensils to other areas of food production. Skill areas: **listening, learning to learn**

Examples: Cookies, stuffed potatoes, deviled eggs, garnishes.

7. Have students practice mixing colors to achieve various tints and shades. Skill area: **science, learning to learn**
8. Have students practice leveling the top of a cake. Skill area: **learning to learn**

Resources Used in Developing This Unit

1. Brand, Mildred. *Easy Cake Decorating Cookbook*. Milwaukee, WI: Ideals Publishing Corporation, 1980.
2. *Discover the Fun of Cake Decorating*. Woodridge, IL: Wilton Enterprises/Pillsbury Company, 1979.

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Suggested Activities

Instructions For Evaluating Student Performance

When the student is ready to perform a specific task, obtain a copy of the job sheet which may be found in either the teacher or student edition. Then observe the student performing the procedure.

Process evaluation—Place a mark in the box to the left of each designated checkpoint if the student has satisfactorily achieved the step(s) for each checkpoint area. If the student is unable to correctly complete the procedure, have the student review the materials and try again.

Product evaluation—Once the student has satisfactorily completed the procedure, rate the student product (outcome) using the criteria which have been provided as part of the job sheet. If the student's product is unacceptable, have the student review the materials and submit another product for evaluation.

Sample performance evaluation keys have been provided below. Many other keys are available. Select one rating (grading scale) which best fits your program needs.

Option A

- 4 - Skilled—Can perform job with no additional training.
- 3 - Moderately skilled—Has performed job during training program; limited additional training may be required.
- 2 - Limited skill—Has performed job during training program; additional training is required to develop skill.
- 1 - Unskilled—Is familiar with process, but is unable to perform job.

Option B

- Yes—Can perform job with no additional training.
- No—Is unable to perform job satisfactorily.

Cake Decorating Unit 11

Answers to Written Test

1. a, b, d, f, g, h
2. b, c
3. a. 4
b. 3
c. 1
d. 2
4. a. 2 d. 6
b. 5 e. 4
c. 1 f. 3
5. a. Brush
b. Level
c. Before
d. To a corrugated cardboard cake circle or base
e. Icing
6. a. First finger
b. Fourth and fifth
c. First

**Cake Decorating
Unit 11**

Written Test

Name _____ Score _____

1. Select from a list equipment used in cake decorating. Write an "X" in the blank before each correct piece of equipment.

- _____ a. Spatulas
- _____ b. Flower nail
- _____ c. 9-inch cake pan with 1-inch sides
- _____ d. Decorating tubes
- _____ e. Rubber scraper
- _____ f. Parchment bag
- _____ g. Revolving cake stand
- _____ h. Cake bases
- _____ i. Measuring spoons

2. Select from a list advantages of paste colors over liquid or powdered colors for cake decorating. Write an "X" before each advantage.

- _____ a. Make the consistency of the icing thicker
- _____ b. Are stronger, giving deeper, darker colors
- _____ c. Are more concentrated
- _____ d. Can be dried out to make powdered colors
- _____ e. Are less concentrated

Written Test

3. Match color combinations with their resultant colors. Write the correct numbers in the blanks.

_____ a.	Green + red	1. Orange
_____ b.	Red + blue	2. Green
_____ c.	Red + yellow	3. Violet or purple
_____ d.	Blue + yellow	4. Brown

4. Match color terms with their definitions. Write the correct numbers in the blanks.

_____ a.	Pleasant combination of two or more colors	1. Color contrast
_____ b.	Any graduation of color with reference to its degree of darkness	2. Color harmony
_____ c.	Effect of striking difference of adjacent borders	3. Tinge
_____ d.	Lack of intensity of color	4. Tint
_____ e.	Graduation of color with reference to its degree of whiteness	5. Shade
_____ f.	Diffusion of small amount of contrasting color that is blended into the original color	6. Pale

5. Complete guidelines for preparing a cake for decorating. Circle the appropriate word(s).

- a. (Wipe, Brush) loose crumbs from cake layers.
- b. Make sure the layers are (level, slightly rounded).
- c. Always chill the layers (before, after) decorating.
- d. Attach the cake (directly to the cake plate, to a corrugated cardboard cake circle or base).
- e. Give the cake a smooth coating of (powdered sugar, icing).

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Written Test

6. Complete guidelines for using a flower nail. Circle the appropriate word(s).
- a. Hold the nail with the thumb and (first finger, ring finger) of left hand.
 - b. Lightly steady the nail with the (third and fourth, fourth and fifth) fingers.
 - c. Roll the nail between the first joint of the (first, second) finger and the end of that finger.

*Permission to duplicate this test is granted.

**Cake Decorating
Unit 11**

Unit Evaluation Form

Student Name _____ Unit Rating _____

Job Sheet 1—Prepare and Evaluate Buttercream Icing Rating _____

Comments: _____

Job Sheet 2—Prepare and Evaluate Royal Icing Rating _____

Comments: _____

Job Sheet 3—Ice a Cake Before Decorating Rating _____

Comments: _____

Job Sheet 4—Prepare a Decorating Cone and Tube Rating _____

Comments: _____

Job Sheet 5—Make a Border Rating _____

Comments: _____

Job Sheet 6—Make a Rose Rating _____

Comments: _____

Written Test Scores

Pretest _____ Posttest _____ Other _____

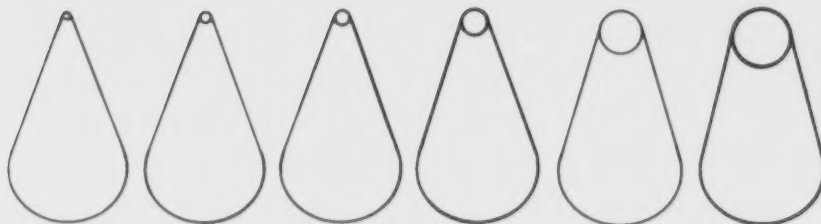
Other _____

Teacher Signature _____ Date _____

Student Signature _____ Date _____

*Permission to duplicate this form is granted.

Decorating Tubes



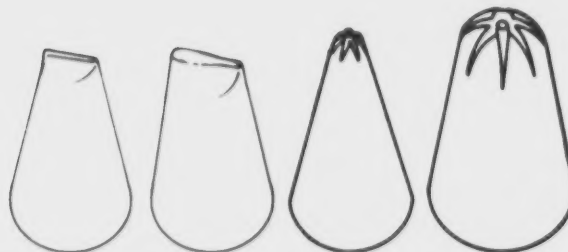
**Round
Tubes**

1 2 3 6 10 12

Star Tubes



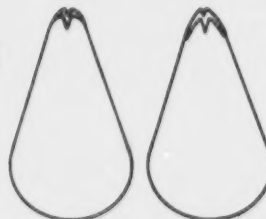
13 16 17 19 21 32



**Petal
Tubes**

102 104 225 190

Leaf Tubes



65 67

507

Cake Decorating Unit 11

Information Sheet

1. Equipment used in cake decorating

- a. Parchment bag

Note: There are two basic types of decorating bags: plastic coated and parchment. The plastic coated bags are pliable, reusable, and dishwasher safe. The parchment cone is purchased as a flat, triangular sheet of paper and then rolled into a cone. It is discarded after use.

- b. Decorating tubes (Transparency 1)

Note: There are many tubes from which to choose; however, select some of the more basic shapes that will serve nearly any purpose.

- Star tubes
- Round tubes
- Petal tubes
- Leaf tubes

- c. Flower nail

- d. Revolving cake stand

- e. Cake bases

- f. Spatulas

2. Advantages of paste colors over liquid or powdered colors

Note: Although colors are available in paste, liquid, and powdered forms, paste is preferred and used by most professional decorators.

- a. Do not change the consistency of icings
- b. Are stronger, giving deeper, darker colors
- c. Are more concentrated

Note: A little goes a long way.

- d. Can be used to make liquid colors

Note: When using colors, select colors of superior quality. Normally, use pastel colors unless decorating for special events such as children's parties. Practice will help the decorator determine pleasing combinations of colors.

Information Sheet

3. Mixing colors

Note: Most colors can be made from combinations of the three basic colors: red, yellow, and blue. Intensity is determined by the amount of color used in the icing.

- a. Red + yellow = orange
- b. Blue + yellow = green
- c. Red + blue = violet or purple
- d. Green + red = brown

4. Color terms and definitions

- a. **Color contrast** — Effect of striking difference of adjacent borders
- b. **Color harmony** — Pleasing combination of two or more colors
- c. **Tinge** — Diffusion of small amount of contrasting color that is blended into the original color
- d. **Tint** — Graduation of color with reference to its degree of whiteness
- e. **Shade** — Any graduation of color with reference to its degree of darkness
- f. **Pale** — Lack of intensity of color

5. Guidelines for preparing a cake for decorating

- a. Brush loose crumbs from cake layers.
- b. Make sure the layers are level.

Note: There are several procedures that can help keep the layers level. However, if there is still a mound in the center, chill the layer and level the surface with a serrated knife.

- c. Always chill the layers before decorating.

Note: Chilling gives the layers a much firmer texture and makes them easy to handle and move.

- d. Attach the cake to a corrugated cardboard cake circle or base.

Note: This makes it easier to move, allows for easier separation of tiers, and prevents knife scratches on the serving tray.

- e. Give the cake a smooth coating of icing.

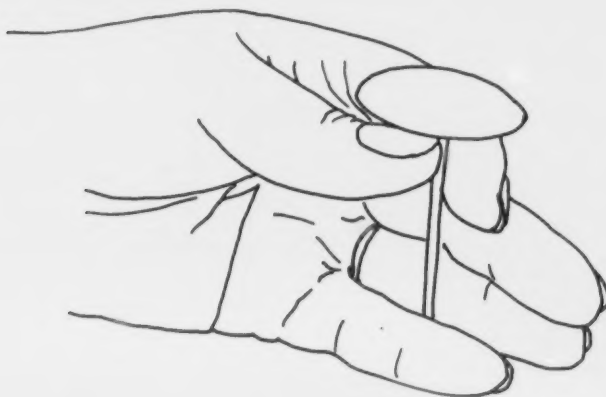
Information Sheet

6. Guidelines for using a flower nail

- a. Hold the nail with the thumb and first finger of left hand (right hand if left-handed).
- b. Lightly steady the nail with the fourth and fifth fingers.

Note: The head of the nail should rest against the side of the finger at all times; the tip is held steady by placing the little finger over it.

Figure 1



- c. Roll the nail between the first joint of the first finger and the end of that finger.

Cake Decorating Unit 11

Job Sheet 1—Prepare and Evaluate Buttercream Icing

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment—Mixer

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 1

Name: Buttercream Icing		
Yield: 1½ qt.		
Utensils: Baker's scale, measuring utensils, mixing bowl, paddle, spatula		
Ingredients	Quantity	Method
Shortening	1 lb. 8 oz.	1. Place all the ingredients in mixing bowl.
Powdered sugar	2 lb. 8 oz.	2. Beat at medium speed until smooth.
Egg whites	1 oz.	
Cornstarch (only in hot weather)	2 oz.	

- ☐ 3. Evaluate the buttercream icing.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Smooth and silky				
Flavor	Characteristic of kind				
Texture	Creamy Free of lumps; not runny				

Total Points _____

Scoring

21-25 points — Servable; good technique
 16-20 points — Check technique; serve with improvement in mind
 10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

Job Sheet 1

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.
- ☐ 6. Clean the work area.

Evaluator's comments: _____

Cake Decorating Unit 11

Job Sheet 2—Prepare and Evaluate Royal Icing

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment—Mixer

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 2

Name: Royal Icing		
Yield: Decorates one 8-inch cake		
Utensils: Baker's scale, measuring utensils, small mixing bowls (2), spatula		
Ingredients	Quantity	Method
Water	$\frac{2}{3}$ c.	1. Combine water, meringue powder, and cream of tartar in small mixing bowl.
Meringue powder	4 T.	2. Beat until stiff peaks form.
Cream of tartar	$\frac{1}{2}$ t.	3. Combine confectioner's sugar and gum arabic in separate bowl and mix thoroughly.
Confectioner's sugar, sifted	2 lb.	4. Add to meringue.
Gum arabic	1 T	5. Beat on low speed until stiff peaks are formed.

- ☐ 3. Evaluate the royal icing.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Stiff and peaked				
Flavor	Characteristic of kind				
Texture	Creamy Body forms peaks; not flat or runny				

Total Points _____

Scoring

21-25 points — Servable; good technique
 16-20 points — Check technique; serve with improvement in mind
 10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

Job Sheet 2

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

☐ 5. Clean utensils, and return unused ingredients to proper storage.

☐ 6. Clean the work area.

Evaluator's comments: _____

Cake Decorating Unit 11

Job Sheet 3—Ice a Cake Before Decorating

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Top and bottom cake layers aligned	_____
Icing evenly distributed (no thin spots)	_____
Icing free of cake crumbs	_____
Work area well organized and cleaned	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Cake layers
 Buttercream icing (Job Sheet 1)
 Turntable
 Spatulas
 Stiff, clean cardboard

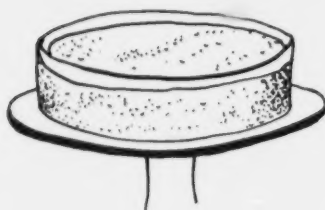
B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Brush off any loose crumbs from the base layer of the cake.
- ☐ 3. Set the base layer on the turntable, attaching it with a few dabs of icing.

Job Sheet 3

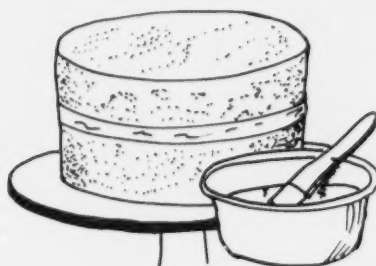
- ☐ 4. Place a ring of icing around the top edge of the layer, using any large tube, and then spread the filling within it. (Figure 1)

Figure 1



- ☐ 5. Brush any loose crumbs from the top layer.
- ☐ 6. Set the top layer on the base layer. (Figure 2)

Figure 2



- ☐ 7. Give the cake a crumb coating.
- a. Use a spatula to cover the cake with a very thin coat of whatever icing is being used for the final coating.
- Note: This coat will mask the color of the cake so that it will not show through.
- b. Let icing set about 10 minutes until a crust forms.

Job Sheet 3

8. Apply the final coat of icing.

- ☐ a. Cover the sides of the cake. (Figure 3)

Note: Work from the bottom up, using long even strokes and plenty of icing. Build up the icing a little at the top edge of the cake. Turn the turntable as the icing is spread. Do not smooth the icing.

Figure 3



- ☐ b. Heap icing on the top of the cake, and spread it out. (Figure 4)

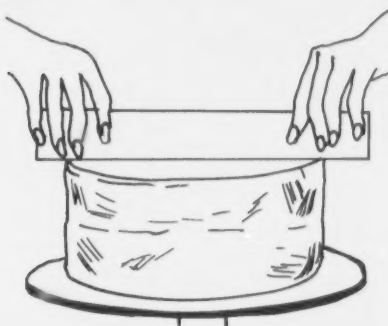
Figure 4



Job Sheet 3

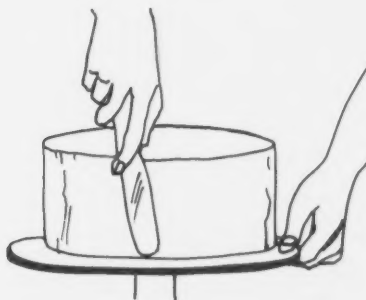
- ☐ c. Use a strip of stiff, clean cardboard to smooth the top. (Figure 5)

Figure 5



- ☐ d. Smooth the sides, holding the long spatula at a slight angle and slowly spinning the turntable. (Figure 6)

Figure 6



- ☐ 9. Slide a spatula under the cake and transfer it to a serving tray or foil-covered cake board.
- ☐ 10. Clean utensils, and return unused ingredients to proper storage.
- ☐ 11. Clean the work area.

Evaluator's comments: _____

Cake Decorating Unit 11

Job Sheet 4—Prepare a Decorating Cone and Tube

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Paper cut and folded to correct dimensions	_____
Tip opening appropriate size	_____
Cone no more than three-fourths full	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Tape or stapler
15-inch, precut triangle of parchment paper
Decorating tube
Scissors
Buttercream icing (Job Sheet 1)

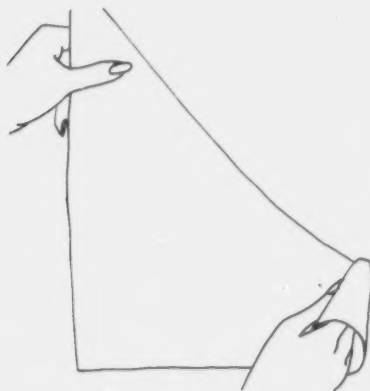
B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Lay a 15-inch precut triangle of parchment paper flat with the longest side away from you.
- ☐ 3. Slide your right hand, palm up, under the right-hand point of the triangle.

Job Sheet 4

- ☐ 4. Grasp edge with thumb and forefinger, keeping thumb on top. (Figure 1)

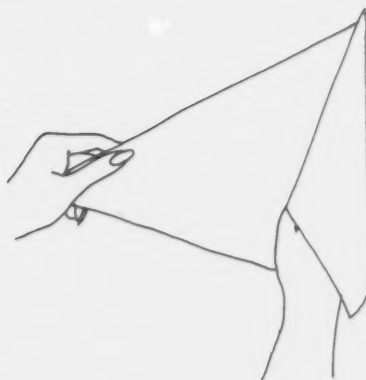
Figure 1



- ☐ 5. Roll your right hand toward the center, holding the opposite corner firmly with your left hand. (Figure 2)

Note: The cone will start to form almost automatically.

Figure 2



Job Sheet 4

- ☐ 6. Twirl the left corner of the triangle all the way around the cone. (Figure 3)

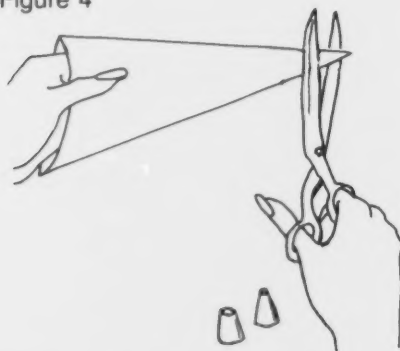
Figure 3



- ☐ 7. Work it back and forth until the point is needle sharp.
- ☐ 8. Staple the cone near the top, or fasten it with a strip of tape.
- ☐ 9. Cut off the tip of the completed cone about $\frac{1}{2}$ inch from the end. (Figure 4)

Note: Take care not to cut off too much or the decorating tube will fall through. You can always trim off more.

Figure 4



- ☐ 10. Drop the desired tube into the cone, small end down.

Note: About $\frac{1}{2}$ -inch of the tube should be visible, extending from the cone.

Job Sheet 4

- ☐ 11. Fill the cone three-quarters full, holding it with your left hand and using a small spatula to scoop the icing inside. (Figure 5)

Figure 5



- ☐ 12. Press the spatula against your left thumb to release the icing.
- ☐ 13. Fold top edge of cone in a "diaper fold," and then, when using, fold repeatedly to force icing into the tube.
- ☐ 14. Clean utensils, and return unused ingredients to proper storage.
- ☐ 15. Clean the work area.

Evaluator's comments: _____

Cake Decorating Unit 11

Job Sheet 5—Make a Border

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Cone held properly and at correct angle for effect desired	_____
Produced desired pattern	_____
Border evenly distributed	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Buttercream icing (Job Sheet 1)
Decorating cone (Job Sheet 4)
No. 16 decorating tube
Cake ready for decorating

Note: You may wish to practice the following procedure on a cookie sheet or board before applying to the cake.

B. Procedure

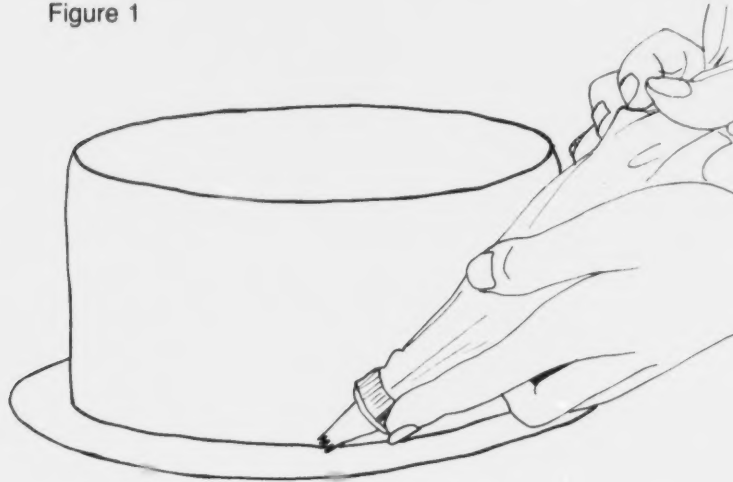
- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Hold the filled cone in your right hand, thumb on top.

Job Sheet 5

- ☐ 3. Point it at a 45-degree angle to the base of the cake. (Figure 1)

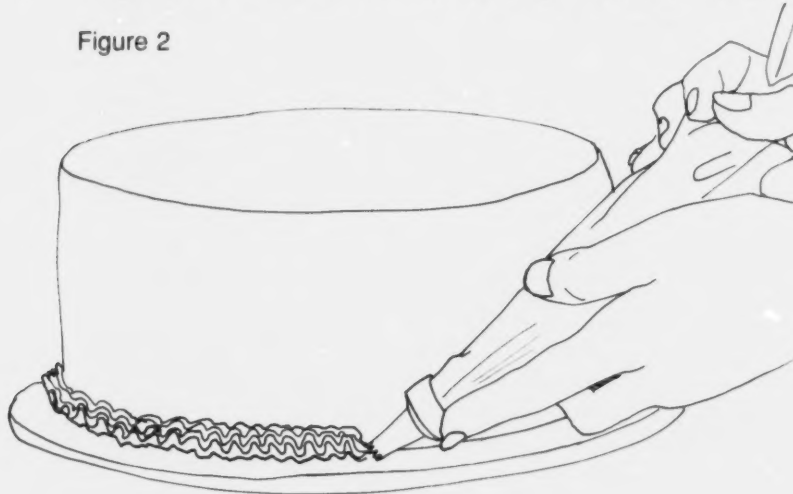
Note: A 45-degree angle is midway between horizontal and straight up. This angle is best for top borders also.

Figure 1



- ☐ 4. Squeeze the cone with your right hand, while guiding the cone with your left hand.
- ☐ 5. Make close up and down motions to produce a zigzag design.
- ☐ 6. Progress around the cake base, repeating the process. (Figure 2)

Figure 2



Job Sheet 5

- ☐ 7. Clean utensils, and return unused ingredients to proper storage.
- ☐ 8. Clean the work area.

Evaluator's comments: _____

Cake Decorating Unit 11

Job Sheet 6—Make a Rose

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Nail held and manipulated effectively	_____
Produced desired pattern (rose)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Royal icing (Job Sheet 2)
Decorating cone (Job Sheet 4)
No. 8 and No. 104 decorating tube
No. 7 nail

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Attach No. 8 tube to decorating cone.
- ☐ 3. Fill cone with icing.
- ☐ 4. Place a few waxed paper squares on the practice board, securing each with a dot of icing.
- ☐ 5. Form a ½-inch ball of icing in the center of a square, keeping the tip of the tube slightly under the surface of the icing.
- ☐ 6. Bring the tube straight up about 1 inch from the ball of icing to form a cone.

Job Sheet 6

- ☐ 7. Release pressure gradually as the tube moves upward. (Figure 1)

Figure 1



- ☐ 8. Bring the tip of the tube out of the icing as the cone is completed.
- ☐ 9. Change to the No. 104 tube.
- ☐ 10. Place a dot of icing on the nail.
- ☐ 11. Transfer the cone of icing from the waxed paper to the nail.
- ☐ 12. Holding the nail in your left hand, lightly place the wide end of the tube just below the top center of the icing cone.
- ☐ 13. While rolling the nail counterclockwise, apply pressure and form the rose center, tipping the tube slightly inward so that the second cone will have a small center hole at the top. (Figure 2)

Figure 2



- ☐ 14. Release the pressure and break off flow of icing.
- ☐ 15. Add three overlapping petals, each covering about one-half of the center of the rose.
- ☐ a. Press the wide end of the tube lightly against the icing at the base of the cone, close to the nail, pointing the narrow end to the right.

Job Sheet 6

- ☐ b. Apply pressure and turn the narrow end upward, close to the cone, then to the left and down almost to the nail, arching the icing to form a petal. (Figure 3)

Figure 3



- ☐ 16. Bring the tube back slightly to overlap the first petal.
- ☐ 17. Arch the icing up and to the left.
- ☐ 18. Repeat for the third petal.
- ☐ 19. Add five more petals using the above procedure, again starting at the base of the flower, close to the nail.
- ☐ 20. Tip the narrow end of the tube out further to form a more open petal which will roll at the top. (Figure 4)

Figure 4



- ☐ 21. Slip the waxed paper with the completed rose onto a tray to dry.

Note: This flower may be made directly on the nail without the waxed paper and placed on the cake. Slip the tips of partially opened shears under the completed rose and remove it from the nail with the points. Place the rose on the cake by closing the shears and sliding the rose into place with the end of the flower nail.

Job Sheet 6

- ☐ 22. Clean utensils, and return unused ingredients to proper storage.
- ☐ 23. Clean the work area.

Evaluator's comments: _____

Pastries and Pies Unit 12

Objective Sheet

Unit Objective

After completing this unit, the student should be able to prepare and evaluate various pastry doughs, fillings, and pies. The student should demonstrate these competencies by completing the job sheets and scoring a minimum of 85 percent on the written test.

Specific Objectives

After completing this unit, the student should be able to:

1. Match terms related to pastries and pies with their definitions.
2. Select from a list variations of puff paste dough.
3. Complete statements concerning choux paste products and their methods of preparation.
4. List types of pies and pie crusts.
5. Arrange in order the general steps in mixing pie dough.
6. Select from a list guidelines for rolling and shaping pie dough.
7. Select from a list guidelines for baking pies.
8. Complete quality standards for pastry.
9. Match types of pastry and pie fillings with their descriptions.
10. Match pie toppings with the types of pies on which they are generally used.
11. Complete a list of statements concerning standards of quality for pie fillings and toppings.
12. Prepare and evaluate choux paste dough. (Job Sheet 1)
13. Prepare and evaluate custard filling for choux paste products. (Job Sheet 2)
14. Prepare pie crust. (Job Sheet 3)
15. Prepare and evaluate custard pie. (Job Sheet 4)

Objective Sheet

16. Prepare and evaluate butterscotch cream pie. (Job Sheet 5)
17. Prepare and evaluate lemon chiffon pie. (Job Sheet 6)
18. Prepare and evaluate graham cracker crust. (Job Sheet 7)
19. Prepare and evaluate a fruit pie. (Job Sheet 8)
20. Prepare a lattice top for a pie. (Job Sheet 9)
21. Prepare and evaluate meringue topping. (Job Sheet 10)

Pastries and Pies Unit 12

Suggested Activities

Instructional Plan

1. Read the unit carefully and plan for instruction. Study the specific objectives to determine the order in which you will present them.
2. Review the teaching suggestions below, and plan classroom activities. Integrate workplace skills as they apply to your vocational program.
3. Plan your presentation to take advantage of student learning styles and to accommodate special needs students.
4. Obtain materials to supplement instruction of this unit.
5. Review instructions for evaluating student outcomes/performance and make copies of the Unit Evaluation Form.
6. Provide students with unit of instruction.
7. Discuss unit and specific objectives
8. Discuss and demonstrate the job sheet techniques, and review the evaluation criteria for each. Schedule performance dates.
9. Discuss the use of the Unit Evaluation Form with the students, and select and discuss the rating scale that will be used for student evaluation.
10. Give written test.
11. Compile job sheet ratings and written test scores on the Unit Evaluation Form.
12. Reteach and retest as required.

Suggested Activities

Teaching Suggestions

Note: Skill areas appearing in boldface type in the Teaching Suggestions refer to the academic and workplace skills identified by the American Society for Training and Development (ASTD) and the U.S. Department of Labor. These have been adapted by MAVCC.

1. Display market forms of puff paste dough and demonstrate their uses. Skill areas: **listening**
2. Demonstrate pie dough mixing, shaping, and baking, and then have students complete Student Supplement 1 in this unit. Skill area: **learning to learn, listening**
3. Demonstrate methods of preparing choux paste products. Allow students to practice these techniques. Skill areas: **learning to learn, listening**
4. Discuss standards of quality for pastries and pies, pointing out the difference in quality between fresh bakery products and frozen convenience products. Skill area: **listening**

Resources Used in Developing This Unit

1. Armendola, Joseph. *The Baker's Manual for Quantity Baking and Pastry Making*, 3rd ed. Jenks, OK: Williams Book Company.
2. Armendola, J. and D. Lundberg. *Understanding Baking*. Boston: CBI Publishing Company.
3. *Baking Handbook for the School and Food Service Program*. Minneapolis, MN: General Mills, Inc.
4. Sultan, William J. *Elementary Baking*. New York: McGraw-Hill Book Company.
5. Shugart, Grace and Mary Molt. *Food for Fifty*, 8th ed. New York: Macmillan, 1989.

Instructions For Evaluating Student Performance

When the student is ready to perform a specific task, obtain a copy of the job sheet which may be found in either the teacher or student edition. Then observe the student performing the procedure.

Process evaluation—Place a mark in the box to the left of each designated checkpoint if the student has satisfactorily achieved the step(s) for each checkpoint area. If the student is unable to correctly complete the procedure, have the student review the materials and try again.

Suggested Activities

Product evaluation—Once the student has satisfactorily completed the procedure, rate the student product (outcome) using the criteria which have been provided as part of the job sheet. If the student's product is unacceptable, have the student review the materials and submit another product for evaluation.

Sample performance evaluation keys have been provided below. Many other keys are available. Select one rating (grading scale) which best fits your program needs.

Option A

- 4 - Skilled—Can perform job with no additional training.
- 3 - Moderately skilled—Has performed job during training program; limited additional training may be required.
- 2 - Limited skill—Has performed job during training program; additional training is required to develop skill.
- 1 - Unskilled—Is familiar with process, but is unable to perform job.

Option B

Yes—Can perform job with no additional training.

No—Is unable to perform job satisfactorily.

Pastries and Pies Unit 12

Answers to Written Test

1.	a.	7	g.	6	l.	15	q.	18
	b.	11	h.	1	m.	12	r.	20
	c.	3	i.	14	n.	4	s.	19
	d.	13	j.	9	o.	8	t.	17
	e.	16	k.	2	p.	5	u.	21
	f.	10						

2. a, c, d, f, g

3. Cream puffs

- a. Parchment
- b. Disher
- c. Round
- d. 1

Eclairs

- a. Tip
- b. Three
- c. Rectangular
- d. 1

4. Answer should include any five of the following pies and any two of the following crusts.

Pies

- a. Double-crust
- b. Single-crust
- c. Fruit-filled
- d. Cream-filled
- e. Egg custard
- f. Gelatin-filled
- g. Ice cream-filled
- h. Mousse-filled
- i. Tarts

Pie crusts

- a. Graham cracker
- b. Sweet pastry
- c. Specialty

Answers to Written Test

5. a. 4 d. 3
 b. 5 e. 6
 c. 1 f. 2
6. b, d, e, f
7. a, d, e, g
8. a. Top, sides
 b. Rich
 c. Crumble
 d. Grain
 e. Shrink
9. a. 3
 b. 2
 c. 1
 d. 4
10. a. 4 d. 1
 b. 2 e. 3
 c. 6 f. 5
11. a. Smooth
 b. Sweetness
 c. Shape
 d. Pie type
 e. Unsoaked

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Pastries and Pies
Unit 12

Written Test

Name _____

Score _____

1. Match terms related to pastries and pies with their definitions. Write the correct numbers in the blanks.

- | | | |
|----------|---|------------------|
| _____ a. | A flavorful mixture placed on or under a pie crust | 1. Prebake |
| _____ b. | The leavening agent for puff paste and choux paste products | 2. Fluting |
| _____ c. | A food consisting of a flavorful filling baked in a pan lined with pastry and often topped with pastry | 3. Pie |
| _____ d. | A cooked mixture of water, glucose, and granulated sugar used as an icing or as a base for an icing | 4. Docking |
| _____ e. | A choux paste product consisting of a cylindrical shell filled with pastry cream and often covered with chocolate icing | 5. Crust |
| _____ f. | A puff product used as a base to hold an entrée, a dessert mixture, or an hors d'oeuvre | 6. Choux paste |
| _____ g. | A smooth mixture made by cooking flour, shortening, and water and then adding eggs | 7. Filling |
| _____ h. | To bake a pie shell before filling is added | 8. Pie tape |
| _____ i. | A mixture of flour, sugar, spices or other flavorings, and shortening or butter sprinkled over open-faced fruit pies | 9. Flaky |
| _____ j. | Made up of many very thin layers accomplished by mixing shortening and flour together to form lumps | 10. Pastry shell |
| | | 11. Steam |
| | | 12. Meringue |

Written Test

- _____ k. Pinching the dough on the rim of a pie plate to form a repetitive design
 - _____ l. A ball-shaped choux paste product consisting of a crisp outer shell filled with whipped cream or a pastry cream
 - _____ m. A pie topping made of egg whites beaten with sugar
 - _____ n. Making small holes in a pie crust before baking
 - _____ o. A covering used on the rim of a pie crust to prevent its overbrowning
 - _____ p. The part of a pie made from dough
 - _____ q. A rich dough produced by layering shortening between folds of dough and then rolling and folding the dough a set number of times
 - _____ r. A machine used in large bakeries to roll out pie crusts
 - _____ s. The finished bottom crust of a pie before the filling is added
 - _____ t. A baked food made of pie dough or paste dough
 - _____ u. A puff paste product in which three layers of baked puff pastry are separated by two layers of filling, and the top pastry layer is covered with icing
13. Fondant
14. Crumb topping
15. Cream puff
16. Eclair
17. Pastry
18. Puff paste
19. Shell
20. Mechanical roller
21. Napoleon
2. Select from a list variations of puff pastry. Write an "X" in the blank before each puff pastry variety.
- _____ a. Party shells
 - _____ b. Long Johns
 - _____ c. Cream horns
 - _____ d. Turnovers
 - _____ e. Pop tarts

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Written Test

- _____ f. Napoleons
- _____ g. Butterfly
- _____ h. Cream cheese

3. Complete the following statements concerning choux paste products and their methods of preparation. Circle the correct word(s).

Cream puffs

- a. Line the baking pan with (parchment, onion skin) paper.
- b. Place the batter onto the baking pan with a pastry bag or (spoon, disher).
- c. Make a (round, rectangular) shape.
- d. Space shells (1 inch, 2 inches) apart.

Eclairs

- a. Place the batter onto a baking pan with a pastry bag and (tip, spoon).
- b. Move the bag in a straight line for (3, 4) inches.
- c. Make a (round, rectangular) shape.
- d. Space shells (1 inch, 2 inches) apart.

4. List five types of pies and two types of pie crusts.

Pies

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____

Pie crusts

- a. _____
- b. _____

Written Test

5. Arrange in order the general steps in mixing pie dough. Write a "1" before the first step, a "2" before the second step, and so on.
- _____ a. Sprinkle the water over the mixture of other ingredients.
 - _____ b. Blend with a fork until the dough pulls away from the sides of the bowl.
 - _____ c. Scale or measure the ingredients.
 - _____ d. Dissolve the salt into chilled water.
 - _____ e. Add extra water and toss gently if dough is too firm or dry.
 - _____ f. Cut the shortening into the flour.
6. Select from a list guidelines for rolling and shaping pie dough. Write an "X" in the blank before each correct guideline.
- _____ a. Roll dough that is cold and rather lumpy.
 - _____ b. Lightly dust rolling surface and rolling pin with flour.
 - _____ c. Starting at edges, lightly roll the dough toward center into a rectangular shape about 1/4-inch thick.
 - _____ d. Fold dough in half and then in fourths.
 - _____ e. Gently and quickly remove the dough to the pie pans.
 - _____ f. Unfold the dough, and then crimp the edges.
 - _____ g. Do not dock the bottom crust of single-crust pies before baking.
7. Select from a list guidelines for baking pies. Write an "X" in the blank before each correct guideline.
- _____ a. Cool fruit filling before filling the crust.
 - _____ b. Dock the bottom crust to allow steam to escape
 - _____ c. Brush the rim of the bottom crust with milk before placing top crust on pie.
 - _____ d. Dock single-crust shells before baking.
 - _____ e. Cool baked shells thoroughly before filling.
 - _____ f. Bake pies on sheet pans rather than directly on the oven shelf.
 - _____ g. For a browner crust with better eye appeal, brush top lightly with milk-egg wash, and sprinkle top with granulated sugar before baking.

Written Test

8. Complete the following quality standards for pastry.
- a. **Appearance**—_____ and _____
uniformly brown with rough, almost blistered surface
 - b. **Flavor**—Ingredients _____, well blended, and properly baked
 - c. **Texture**—Tender, free of tendency to _____; crisp on bottom as well as edges
 - d. _____—Flaky, with easily separated layers
 - e. **Consistency**—Uniform shape of individual items, characteristic of type, does not _____
9. Match types of pastry and pie fillings with their descriptions. Write the correct numbers in the blanks.
- | | | |
|----------|---|------------|
| _____ a. | Cold pudding made of milk, sugar, and flavoring added to undocked pie shell and baked | 1. Chiffon |
| _____ b. | Cooked filling made of milk, cornstarch, sugar, eggs, and flavorings | 2. Cream |
| _____ c. | A fruit gelatin mixture into which whipped cream or meringue has been folded before chilling | 3. Custard |
| _____ d. | Fruit filling in which fruit juice is drained, sweetened, thickened, and then added back to fruit | 4. Fruit |
10. Match pie toppings with the types of pies on which they are generally used. Write the correct numbers in the blanks.
- | | | |
|----------|--|---------------------|
| _____ a. | Chiffon and cream pies | 1. Open faced |
| _____ b. | Fruit pies such as apple, blueberry, and peach | 2. Double crust |
| _____ c. | Specialty pies such as Dutch apple | 3. Lattice crust |
| _____ d. | Soft pies such as pumpkin and custard | 4. Meringue |
| _____ e. | Decorative fruit pies such as cherry | 5. Dairy topping |
| _____ f. | Soft pies such as pumpkin | 6. Streusel topping |

Written Test

11. Complete quality standards for pie fillings and toppings. Write the correct words in the blanks.

- a. **Appearance**—_____, free of cracks, uniform brown color where appropriate
- b. **Flavor**—Characteristic of kind, free of excessive _____ or uncooked starch
- c. **Texture**—Characteristic of kind; holds _____ when cut; stiff enough to prevent running
- d. **Compatibility**—Filling and topping are characteristic of type of _____
- e. **Consistency**—Crisp and _____ crust

*Permission to duplicate this test is granted.

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Pastries and Pies
Unit 12

Unit Evaluation Form

Student Name _____ Unit Rating _____

Job Sheet 1—Prepare and Evaluate Choux Paste Dough Rating _____

Comments: _____

Job Sheet 2—Prepare and Evaluate Custard Filling for
Choux Paste Products Rating _____

Comments: _____

Job Sheet 3—Prepare Pie Crust Rating _____

Comments: _____

Job Sheet 4—Prepare and Evaluate Custard Pie Rating _____

Comments: _____

Job Sheet 5—Prepare and Evaluate Butterscotch Cream Pie Rating _____

Comments: _____

Job Sheet 6—Prepare and Evaluate Lemon Chiffon Pie Rating _____

Comments: _____

Job Sheet 7—Prepare and Evaluate Graham Cracker Crust Rating _____

Comments: _____

Unit Evaluation Form

Job Sheet 8—Prepare and Evaluate a Fruit Pie

Rating _____

Comments: _____

Job Sheet 9—Prepare a Lattice Top for a Pie

Rating _____

Comments: _____

Job Sheet 10—Prepare and Evaluate Meringue Topping

Rating _____

Comments: _____

Written Test Scores

Pretest _____

Posttest _____

Other _____

Other _____

Teacher Signature _____

Date _____

Student Signature _____

Date _____

*Permission to duplicate this form is granted.

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Pastries and Pies Unit 12

Information Sheet

1. Terms and definitions

- a. **Choux paste** — A smooth mixture made by cooking flour, shortening, and water and then adding eggs
- b. **Cream puff** — A ball-shaped choux paste product consisting of a crisp outer shell filled with whipped cream or a pastry cream
- c. **Crumb topping** — A mixture of flour, sugar, spices or other flavorings, and shortening or butter sprinkled over open-faced fruit pies
- d. **Crust** — The part of a pie made from dough
- e. **Docking** — Making small holes in a pie crust before baking
- f. **Eclair** — A choux paste product consisting of a cylindrical shell filled with pastry cream and often covered with chocolate icing
- g. **Filling** — A flavorful mixture placed on or under a pie crust
- h. **Flaky** — Made up of many very thin layers accomplished by mixing shortening and flour together to form lumps

Note: The mixing is done in the preparation of pie crust dough.

- i. **Fluting** — Pinching the dough on the rim of a pie plate to form a repetitive design
- j. **Fondant** — A cooked mixture of water, glucose, and granulated sugar used as an icing or as a base for an icing

Note: Fondant is usually used as a finish for eclairs and napoleons.

- k. **Mechanical roller** — A machine used in large bakeries to roll out pie crusts
- l. **Meringue** — A pie topping made of egg whites beaten with sugar
- m. **Napoleon** — A puff paste product in which three layers of baked puff pastry are separated by two layers of filling, and the top pastry layer is covered with icing
- n. **Pastry** — A baked food made of pie dough or paste dough

Information Sheet

- o. **Pastry shell** — A puff product used as a base to hold an entrée, a dessert mixture, or an hors d'oeuvre
 - p. **Pie** — A food consisting of a flavorful filling baked in a pan lined with pastry and often topped with pastry
 - q. **Pie tape** — A covering used on the rim of a pie crust to prevent its overbrowning
 - r. **Prebake** — To bake a pie shell before filling is added
 - s. **Puff paste** — A rich dough produced by layering shortening between folds of dough and then rolling and folding the dough a set number of times
 - t. **Shell** — The finished bottom crust of a pie before the filling is added
 - u. **Steam** — The leavening agent for puff paste and choux paste products
2. **Variations of puff paste dough**
- a. Party shells
 - b. Cream horns
 - c. Cheese sticks
 - d. Cream slices
 - e. Turnovers
 - f. Napoleons
 - g. Butterfly
3. **Choux paste products and their methods of preparation**
- a. Cream puffs
 - Line the baking pan with parchment paper.
 - Place the batter onto the baking pan with a pastry bag or disher.
 - Make a round shape.
 - Space shells 1 inch apart.

Information Sheet**b. Eclairs**

- Place the batter onto a baking pan with a pastry bag and tip.
- Move the bag in a straight line for 3 inches.
- Make a rectangular shape.
- Space shells 1 inch apart.

4. Types of pies and pie crusts**a. Pies**

- Double-crust
- Single-crust
- Fruit-filled
- Cream-filled
- Egg custard
- Gelatin-filled
- Ice cream-filled
- Mousse-filled
- Tarts

b. Pie crusts

- Graham cracker
- Sweet pastry
- Specialty

5. General steps in mixing pie dough

- a. Scale or measure the ingredients.
- b. Cut the shortening into the flour.
- c. Dissolve the salt into chilled water.

Information Sheet

- d. Sprinkle the water over the mixture of other ingredients.
- e. Blend with a fork until the dough pulls away from the sides of the bowl.
- f. Add extra water and toss gently if dough is too firm or dry.

Note: Shrinkage and toughness of pie crust are due to improper handling and overmixing.

6. Guidelines for rolling and shaping pie dough

- a. Roll dough that is cold and rather stiff.
- b. Lightly dust rolling surface and rolling pin with flour.
- c. Starting at center, lightly roll the dough into a circular shape about $\frac{1}{8}$ -inch thick.
- d. Fold dough in half and then in fourths.
- e. Gently and quickly remove the dough to the pie pans.
- f. Unfold dough and crimp the edges.
- g. Dock the bottom and sides of single-crust pies before baking.
- h. Do not dock the bottom crust of double-crust or custard filled pies.

7. Guidelines for baking pies

- a. Cool fruit filling before filling the crust.
- b. Cool baked shells thoroughly before filling.
- c. Cut a vent in the top crust to allow steam to escape.
- d. Brush the rim of the bottom crust with water before placing top crust on pie; seal by pressing down around the entire rim.
- e. Dock single-crust shells before baking.

Note: Place an empty pie pan into the prepanned pie dough and turn upside down for baking process. This method helps reduce shrinkage.

- f. Do not overfill two-crust pies.
- g. Bake pies directly on the oven shelf rather than on sheet pans.
- h. For a browner crust with better eye appeal, brush top lightly with milk-egg wash (1 cup milk, 1 egg blended with a wire whip), and sprinkle top with granulated sugar before baking.

Information Sheet

8. Quality standards for pastry

- a. **Appearance**—Top and sides uniformly brown with rough, almost blistered surface
- b. **Flavor**—Ingredients rich, well blended, and properly baked
- c. **Texture**—Tender, free of tendency to crumble; crisp on bottom as well as edges
- d. **Grain**—Flaky, with easily separated layers
- e. **Consistency**—Uniform shape of individual items, characteristic of type, does not shrink

9. Types of pastry and pie fillings

- a. **Custard**—Cold pudding made of milk, sugar, and flavoring added to undocked pie shell and baked
- b. **Cream**—Cooked filling made of milk, cornstarch, sugar, eggs, and flavorings
- c. **Chiffon**—A fruit gelatin mixture into which whipped cream or meringue has been folded before chilling

Note: This type of filling is often used in graham cracker or vanilla wafer crumb crusts.

- d. **Fruit**—Fruit filling in which fruit juice is drained, sweetened, thickened, and then added back to fruit

10. Types of pie toppings

- a. **Open-faced**—Soft pies such as custard and pumpkin
- b. **Double crust**—Fruit pies such as apple, blueberry, and peach
- c. **Lattice crust**—Decorative fruit pies such as cherry
- d. **Meringue**—Chiffon and cream pies
- e. **Dairy topping**—Soft pies such as pumpkin
- f. **Streusel topping**—Specialty pies such as Dutch apple

Information Sheet

11. Quality standards for pie fillings and toppings

- a. **Appearance**—Smooth, free of cracks, uniform brown color where appropriate
- b. **Flavor**—Characteristic of kind, free of excessive sweetness or uncooked starch
- c. **Texture**—Characteristic of kind; holds shape when cut; stiff enough to prevent running
- d. **Compatibility**—Filling and topping are characteristic of pie type
- e. **Consistency**—Crisp, and unsoaked crust

Pastries and Pies

Unit 12

Student Supplement 1—Arrange in Order the Operations for Rolling and Shaping Pie Dough

Name _____

Below are three sets of directions for various operations used in making pies. The directions are in mixed-up order. Number the steps in each set in the order in which they should be performed. When you have finished, check your answers against those on the next page.

1. Mixing pie dough

- _____ a. Sprinkle the water over the mixture of other ingredients.
- _____ b. Roll and refrigerate the dough.
- _____ c. Scale or measure the ingredients.
- _____ d. Cut the shortening into the flour.
- _____ e. Dissolve the salt into chilled water.
- _____ f. Blend with a fork until the dough pulls away from the sides of the bowl.

2. Rolling and fitting a bottom crust

- _____ a. Trim the excess dough around the rim to $\frac{1}{2}$ inch for a one-crust pie or up to the rim for a two-crust pie.
- _____ b. Gently press the dough into the bottom of the pan.
- _____ c. Lightly flour the table and place the dough in the center.
- _____ d. Roll the dough in each direction, from the center out, until it is $\frac{1}{2}$ -inch thick.
- _____ e. Cut and scale the dough.
- _____ f. Check the size of the dough with the pan.
- _____ g. Fold the dough in half, place it in the pan, and then unfold it.

Student Supplement 1

3. Preparing a two-crust pie

- _____ a. Place and trim the dough for the bottom crust.
- _____ b. Unfold the top crust over the filled pie.
- _____ c. Brush water on the rim of the bottom crust.
- _____ d. Brush the top crust, but not the rim, with milk.
- _____ e. Brush the bottom of the crust with butter and refrigerate.
- _____ f. Fold the overhanging part of the top crust under the rim of the bottom crust.
- _____ g. Seal the edges by pressing with fork or by fluting.
- _____ h. Roll the top crust until it is about 1 inch larger than the rim.
- _____ i. Fill the pie.
- _____ j. Cut vent in the top crust to allow steam to escape.

1. a. 4 d. 2
b. 6 e. 3
c. 1 f. 5

2. a. 7 e. 1
b. 6 f. 4
c. 2 g. 5
d. 3

3. a. 1 f. 7
b. 6 g. 8
c. 4 or 5 h. 3
d. 9 i. 5 or 4
e. 2 j. 10

Pastries and Pies Unit 12

Job Sheet 1—Prepare and Evaluate Choux Paste Dough

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment—Range

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 1

Name: Choux Paste Dough		
Yield: 100 units		Portion: Approximately 1 ounce
Utensils: Baker's scale, baking pans, parchment paper, pastry bag and tips or No. 24 disher, sauce pot, mixing utensils		
Ingredients	Quantity	Method
Water or milk Shortening or butter Salt Bread flour Eggs	2 lb. 1 lb. ½ oz. 1 lb. 8 oz. 2 lb. 8 oz.	1. Combine ingredients in sauce pot. 2. Bring to a rolling boil. 3. Combine bread flour with sauce pot mixture; blend. 4. Cook until the mixture is smooth and rolls free from sides of pot. 5. Remove from heat. 6. Add eggs slowly until a medium stiff paste is obtained; blend well after adding each egg. 7. Scale into approx. 1 oz. units, and portion into cream puff or eclair shells as desired. 8. Bake at 400°F for 25 to 30 minutes. 9. Turn off oven, crack oven door 4 to 6 inches, and allow product to stay in oven until cool.

- ☐ 3. Evaluate the choux paste dough.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Job Sheet 1

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Uniform browning of top and sides, with rough, almost blistered, surface				
Flavor	Rich, well blended, and properly baked ingredients				
Texture	Tender, but free of tendency to crumble Crisp on bottom as well as edges				
Grain	Flaky, with easily separated layers				
Consistency	Uniform shape of individual items Characteristic of type Does not shrink				

Total Points _____

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

Job Sheet 1

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.
- ☐ 6. Clean the work area.

Evaluator's comments: _____

Pastries and Pies Unit 12

Job Sheet 2—Prepare and Evaluate Custard Filling for Choux Paste Products

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment—Range

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 2

Name: Custard Filling		
Yield: 3 qts.		Portion: Will fill 50 cream puffs
Utensils: Sauce pan, mixing bowl, measuring utensils, wire whip		
Ingredients	Quantity	Method
Corn starch	6 oz.	1. Combine dry ingredients.
Sugar	1 lb.	2. Add cold milk and stir until smooth.
Salt	½ t.	3. Add cold mixture to hot milk, stirring constantly.
Milk, cold	2 c.	4. Cook over hot water until thick.
Milk, hot	2½ qt.	5. Add eggs gradually to thickened mixture; cook 7 minutes.
Eggs, beaten	10	6. Remove from heat.
Vanilla	2 t.	7. Add vanilla.
		8. Cool.
Note: To fill three 9-inch layer cakes, use ⅓ recipe.		

- ☐ 3. Evaluate the custard filling.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Smooth No skin on top				
Flavor	Characteristic of kind Free of excessive sweetness or uncooked starch				
Texture	Smooth and creamy				
Compatibility	Compatible with topping				

Total Points _____

Scoring

- 21-25 points — Servable; good technique
 16-20 points — Check technique; serve with improvement in mind
 10-15 points — Check technique; do not serve

Job Sheet 2

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.

- ☐ 6. Clean the work area.

Evaluator's comments: _____

Pastries and Pies Unit 12

Job Sheet 3—Prepare Pie Crust

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to criteria in Job Sheet 4	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Oven
Mixer

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 3

Name: Pie Crust		
Yield: 4½ lb.		Portion: Eight 8-in., two-crust pies
Utensils: Mixing bowl, measuring utensils, pastry knife, rolling pin, pie pans, baker's scale		
Ingredients	Quantity	Method
Flour Shortening Water, cold Salt	2 lb. 1 lb. 8 oz. 1½ to 1¾ c. 1½ T.	1. Mix flour and shortening at low speed 1 minute. 2. Dissolve water and salt; add to mixture. 3. Mix at low speed only until a dough is formed, about 40 seconds. 4. Scale into 5-oz. balls for bottom crust and 4-oz. balls for top crust. 5. Let stand 10 minutes in refrigerator before rolling. 6. Roll into circle 2 in. larger than pie pan. 7. Fit crust loosely into pan so that there are no air spaces between crust and pan. 8. Trim, allowing ½ in. extra to build up edge.

- ☐ 3. Clean utensils, and return unused ingredients to proper storage.
- ☐ 4. Clean the work area.

Evaluator's comments: _____

Pastries and Pies Unit 12

Job Sheet 4—Prepare and Evaluate Custard Pie

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Range
Mixer

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 4

Name: Custard Pie		
Yield: Eight 8-in. pies		Portion: 6 slices per pie
Utensils: Pie pans, mixing bowl, measuring utensils, mixing spoon, baker's scale, sauce pan		
Ingredients	Quantity	Method
Pastry Eggs Sugar Salt Vanilla Milk, scalded Nutmeg	2 lb. 8 oz. 24 1 lb. 8 oz. 1 t. 2 T. 1 gal. 2 t.	1. Follow procedure for making pie crust in Job Sheet 3. 2. Scale dough onto 5 oz. portions. 3. Line eight, 8-in. pie pans, 5 oz. per pan. 4. Flute edges. 5. Beat eggs slightly in mixing bowl. 6. Add sugar, salt, and vanilla; mix. 7. Add hot milk, slowly at first, then more rapidly. 8. Pour into unbaked pie shells. 9. Sprinkle nutmeg over top. 10. Bake for 15 minutes at 450°F, and then 20 minutes at 350°F. Note: The custard filling is done when a knife inserted half way between the edge and center comes out clean.
Note: Coconut Custard Pie: Add 1 lb. flaked coconut; omit nutmeg.		

- ☐ 3. Evaluate the custard pie.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Job Sheet 4

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Smooth, free of cracks Uniform color where appropriate				
Flavor	Characteristic of kind Free of excessive sweetness or uncooked starch				
Texture	Characteristic of kind Holds shape when cut; stiff enough to prevent running				
Compatibility	Filling and topping compatible Characteristic of type pie				
Consistency	Crust should be crisp and unsoaked				

Total Points _____

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

Job Sheet 4

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.
- ☐ 6. Clean the work area.

Evaluator's comments: _____

Pastries and Pies Unit 12

Job Sheet 5—Prepare and Evaluate Butterscotch Cream Pie

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Range
Oven

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 5

Name: Butterscotch Cream Pie		
Yield: Eight 8-in. pies		Portion: 6 slices per pie
Utensils: Baker's scale, measuring utensils, sauce pan, wire whip, thermometer, mixing bowl		
Ingredients	Quantity	Method
Pastry	2 lb. 8 oz.	1. Make pastry.
Butter or margarine	1 lb.	2. Scale dough into 5 oz. portions.
Brown sugar	2 lb. 8 oz.	3. Line eight 8-in. pie pans, 5 oz. per pan.
Milk	3 qt.	4. Flute edges, and dock crust with fork.
Cornstarch	6 oz.	Bake at 425°F for 10 minutes or until light brown.
Flour	6 oz.	5. Melt butter or margarine in sauce pan; add brown sugar and mix thoroughly.
Salt	1 T.	6. Cook over low heat to 220°F, stirring occasionally.
Milk, warm	1 qt.	7. Add milk slowly while stirring; stir until all sugar is dissolved.
Eggs, whole	5	8. Heat mixture to boiling point.
Egg yolks	10	9. Combine cornstarch, flour, and salt in mixing bowl
Vanilla	2 T.	10. Add milk and eggs to flour mixture; mix thoroughly.
Butter or margarine	4 oz.	11. Add to the hot mixture while stirring; cook until thick.
		12. Remove from heat.
		13. Add vanilla and butter or margarine.
		14. Partially cool.
		15. Fill baked pie shells; cover with meringue.
		16. Brown at 375°F for 12 minutes.
Note: Recipe may also be used for pudding: omit flour, increase cornstarch to 8 oz.		

- ☐ 3. Evaluate the butterscotch cream pie.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Job Sheet 5

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Smooth, free of cracks Uniform color where appropriate				
Flavor	Characteristic of kind Free of excessive sweetness or uncooked starch				
Texture	Characteristic of kind Holds shape when cut; stiff enough to prevent running				
Compatibility	Filling and topping characteristic of type of pie				
Consistency	Crust should be crisp and unsoaked				

Total Points _____

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

Job Sheet 5

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.
- ☐ 6. Clean the work area.

Evaluator's comments: _____

Pastries and Pies Unit 12

Job Sheet 6—Prepare and Evaluate Lemon Chiffon Pie

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Range
Oven
Mixer

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 6

Name: Lemon Chiffon Pie		
Yield: Eight 8-in. pies		Portion: 6 slices per pie
Utensils: Mixing bowl, wire whip, baker's scale, measuring utensils, sauce pan or steam kettle, rubber spatula, grater		
Ingredients	Quantity	Method
Pastry	2 lb. 8 oz.	1. Line eight 8-in. pie pans with pastry prepared according to Job Sheet 3, 5 oz. per pan.
Gelatin	1½ oz.	2. Flute edges, and dock crust with fork.
Water, cold	1¾ c.	3. Bake at 425°F for 10 min. or until light brown.
Egg yolks	21	4. Sprinkle gelatin over water. Let stand 10 minutes.
Sugar	1 lb. 8 oz.	5. Beat egg yolks.
Salt	2 t.	6. Add 1 lb. 8 oz. sugar, salt, and lemon juice.
Lemon juice	2½ c.	7. Cook over hot water until thickened; remove from heat.
Lemon rind, grated	2 T.	8. Add softened gelatin, stir until dissolved.
Egg whites	21	9. Add lemon rind.
Sugar	1 lb. 2 oz.	10. Chill until mixture begins to congeal.
Whipping cream	1 qt.	11. Beat egg whites until frothy.
Sugar	¼ c.	12. Gradually add 1 lb. 2 oz. sugar and beat until meringue forms soft peaks.
		13. Fold into lemon mixture.
		14. Pour into baked pie shells. Chill.
		15. Just before serving, whip cream, add ¼ c. sugar. Spread 1 c. of the whipped cream over each pie.

- ☐ 3. Evaluate the lemon chiffon pie.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Job Sheet 6

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Smooth, free of cracks Uniform brown color where appropriate				
Flavor	Characteristic of kind Free of excessive sweetness or uncooked starch				
Texture	Characteristic of kind Holds shape when cut; stiff enough to prevent running				
Compatibility	Filling and topping characteristic of pie type				
Consistency	Crust should be crisp and unsoaked				

Total Points _____

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

Job Sheet 6

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.
- ☐ 6. Clean the work area.

Evaluator's comments: _____

Pastries and Pies Unit 12

Job Sheet 7—Prepare and Evaluate Graham Cracker Crust

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Oven
Mixer

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 7

Name: Graham Cracker Crust		
Yield: Eight 8-in. pies		
Utensils: Baker's scale, mixing bowl, flat paddle, 8 pie pans		
Ingredients	Quantity	Method
Graham cracker crumbs Sugar Butter or margarine, melted	1 lb. 5 oz. 10 oz. 10 oz.	1. Mix all ingredients. 2. Scale crumb mixture into eight 5 oz. portions. 3. Pat scaled units evenly into each of the 8 pie pans. 4. Bake at 375°F for 5 minutes, and then cool. Note: Cool pie crust before filling. 5. Fill shells with cream pie filling or chiffon pie filling prepared according to Job Sheets 5 or 6.
Notes: 1. Crusts may be refrigerated several hours instead of baking. 2. Vanilla wafer crumbs may be substituted for graham cracker crumbs.		

- ☐ 3. Evaluate the graham cracker crust.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Job Sheet 7

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Uniform browning of top and sides, with rough, almost blistered, surface				
Flavor	Rich flavor of well-blended and properly baked ingredients				
Texture	Tender, but free of tendency to crumble Crisp on bottom as well as edges				
Grain	Flaky				
Consistency	Uniform shape of individual items Characteristic of type Does not shrink				

Total Points _____

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

Job Sheet 7

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.
- ☐ 6. Clean the work area.

Evaluator's comments: _____

Pastries and Pies
Unit 12

Job Sheet 8—Prepare and Evaluate a Fruit Pie

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

Range
Oven

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 8

Name: Fruit Pie		
Yield: Eight 8-in. pies		Portion: 6 slices per pie
Utensils: Sauce pan, measuring utensils, mixing spoon, pie pans, baker's scale		
Ingredients	Quantity	Method
Pastry Fruit, water packed Cornstarch Sugar Salt	4 lb. 8 oz. 1½ No. 10 cans 6 oz. 3 lb. 1 T.	1. Make pie crust from Job Sheet 3. Line eight 8-in. pie pans with approx. 5 oz. each of scaled, unbaked crust. 2. Drain fruit; measure fruit liquid and add water to make 1½ qt. 3. Bring 1 qt. of the fruit liquid to boiling 4. Mix remaining 2 c. liquid with cornstarch, then add gradually to hot liquid while stirring. 5. Cook until thick and clear. 6. While liquid mixture is still hot, add sugar and salt. 7. Mix thoroughly and bring to boiling. 8. Add drained fruit and mix carefully. 9. Cool slightly. 10. Measure 3 c. filling into each unbaked pie shell. 11. Moisten edge of bottom crust with water. 12. Cover with perforated top crust. Seal, trim, and flute edges. 13. Bake at 400°F for 30 minutes.
Notes: 1. Recipe may be used for all canned fruit such as apricot, blackberry, blueberry, cherry, gooseberry, peach, or raspberry (sugar variable). 2. For 9-in. pies, use 2 No. 10 cans fruit, 3½ lb. sugar (variable), 8 oz. cornstarch, and 1 oz. salt. Use 3½ c. filling per pie.		

- ☐ 3. Evaluate the fruit pie.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Job Sheet 8

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Smooth, free of cracks Uniform brown color where appropriate				
Flavor	Characteristic of kind Free of excessive sweetness or uncooked starch				
Texture	Characteristic of kind Holds shape when cut; stiff enough to prevent running				
Compatibility	Filling and topping compatible Characteristic of type of pie				
Consistency	Crust should be crisp and unsoaked				

Total Points _____

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

Job Sheet 8

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.
- ☐ 6. Clean the work area.

Evaluator's comments: _____

Pastries and Pies

Unit 12

Job Sheet 9—Prepare a Lattice Top for a Pie

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Lattice strips evenly spaced	_____
Lattice strips uniform width	_____
Top uniformly circular	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment

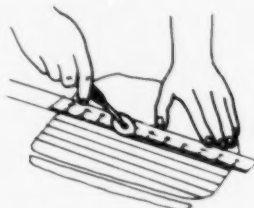
5 ounces of pie dough (Job Sheet 3)
 Ruler
 Pastry wheel (knife)
 Cookie sheet

Aluminum foil
 Pastry brush
 Egg wash
 Rolling pin
 Pie pan, 9 inch

B. Procedure

- ☐ 1. Roll out pie dough into an 8-by-12-inch rectangle.
- ☐ 2. Cut lengthwise into ½-inch strips. (Figure 1)

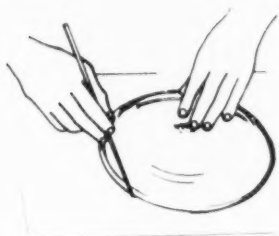
Figure 1



Job Sheet 9

- ☐ 3. Place aluminum foil on cookie sheet.
- ☐ 4. Place 9-inch pie pan upside down on cookie sheet and trace around outside edge. (Figure 2)

Figure 2



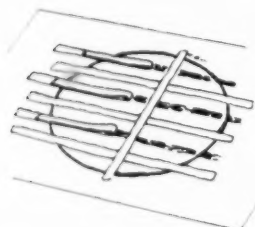
- ☐ 5. Arrange 6 strips of the pie dough about $\frac{3}{4}$ inch apart over the outlined circle. (Figure 3)

Figure 3



- ☐ 6. Fold back every other strip, and then lay down a strip of pastry perpendicular to the others; unfold the strips. (Figure 4)

Figure 4

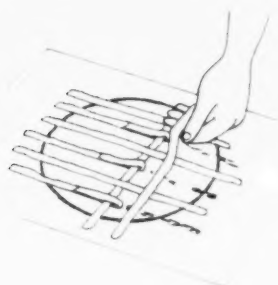


Job Sheet 9

- ☐ 7. Repeat with the other three, alternating strips and weaving in the outermost strip and then three on the other side, working from center out. (Figure 5)

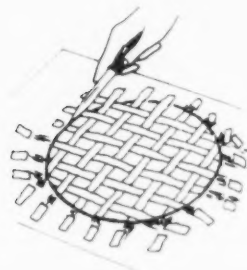
Note: To prevent shrinkage, be sure not to stretch dough.

Figure 5



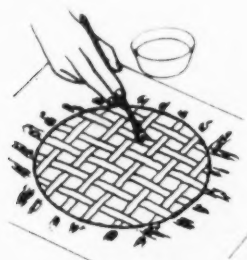
- ☐ 8. Trim the lattice even with the outlined circle. (Figure 6)

Figure 6



- ☐ 9. With a small pastry brush, paint the pastry with egg wash. (Figure 7)

Figure 7



Job Sheet 9

- ☐ 10. Attach the remaining strips around the edge of the lattice, smoothing with your fingers and pressing lightly to seal. (Figure 8)

Note: After the lattice has been made, it is baked and cooled and then placed on top of a baked filled pie.

Figure 8



- ☐ 11. Clean utensils, and return unused ingredients to proper storage.
- ☐ 12. Clean the work area.

Evaluator's comments: _____

Pastries and Pies
Unit 12

Job Sheet 10—Prepare and Evaluate Meringue Topping

Name _____ Attempt Number _____

Date _____ Overall Rating _____

Evaluation criteria	Rating
Utensils and ingredients assembled prior to beginning	_____
Product prepared according to recipe	_____
Product evaluated according to given criteria	_____
Servable product obtained (evaluation score of 16 or more points)	_____

Instructions: When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the above criteria.

A. Equipment—Mixer

Note: Hand tools, utensils, and ingredients are part of the standardized recipe.

B. Procedure

- ☐ 1. Assemble utensils and ingredients at the work station.
- ☐ 2. Prepare the recipe.

Note: The instructor may desire to alter the yield; write any changes in the quantity column.

Job Sheet 10

Name: Meringue for Pies		
Yield: Eight 8-in. pies		
Utensils: Mixing bowl, wire whip, measuring utensils		
Ingredients	Quantity	Method
Egg whites Salt Sugar	16 (2 c.) ½ t. 1 lb.	1. Add salt to egg whites and whip past frothy stage at high speed for approx. 1½ minutes. 2. Add sugar gradually while beating. 3. Beat until sugar has dissolved. Note: The meringue should be stiff enough to hold peaks but not dry. 4. Spread meringue on filling while filling is hot; it should touch all edges of crust. 5. Brown in oven at 375° for 12 minutes.

- ☐ 3. Evaluate the meringue topping.

Note: Use the following chart. Rate each standard of quality according to the characteristics listed, record the number of points in the appropriate columns, and then total all points.

Standards of Quality	Characteristics	Excellent (5 pts.)	Good (4 pts.)	Fair (3 pts.)	Poor (2 pts.)
Appearance	Smooth, free of cracks Uniform golden brown color				
Flavor	Characteristic of kind Free of excessive sweetness				
Texture	Characteristic of kind Holds shape when cut Stiff enough to prevent running				
Compatibility	Filling and topping compatible Characteristic of type of pie				
Consistency	Moist and stiff, but not rubbery Crust should be crisp and unsoaked				

Total Points _____

Sheet 10

Scoring

21-25 points — Servable; good technique

16-20 points — Check technique; serve with improvement in mind

10-15 points — Check technique; do not serve

- ☐ 4. Answer the following questions.

Note: Be prepared to discuss your answers in class.

a. Was the product servable? _____

b. If the product was not servable, why? _____

c. Which of the following should be improved? _____

- Measuring
- Temperature
- Mixing
- Preparation

- ☐ 5. Clean utensils, and return unused ingredients to proper storage.

- ☐ 6. Clean the work area.

Evaluator's comments: _____

